





1, 0 10

1900

BURROUGHS WELLCOME & Co.

GENERAL LIBRARY.

*No.*





# G M E L I N ' S   C H E M I S T R Y .

---

The Concluding Volume (the 18th) of the

## H A N D - B O O K   O F   C H E M I S T R Y ,

Translated and Edited by

H E N R Y   W A T T S ,   B . A . ,   F . R . S . ,

*Is now ready.*

---

H A R R I S O N   A N D   S O N S ,

BOOKSELLERS TO HER MAJESTY AND H.R.H. THE PRINCE OF WALES,

59, PALL MALL, LONDON, S.W.

---

*October 20, 1871.*

MESSRS. HARRISON and SONS have to announce that, in accordance with the arrangements made with the Council of the Cavendish Society, they have completed the above important work.

Subscribers are informed that this, the concluding volume, together with the Index, will be forwarded to all those who have paid their subscription for the year 1864.

Several of the volumes being now out of print, and others very scarce, subscribers desirous of completing sets are requested to make early application.

Messrs. Harrison and Sons are enabled to offer, for a limited period, complete sets of the Organic Chemistry (12 volumes) for Four Guineas, or separate volumes at 10s. 6d. each.

*59, Pall Mall, London, S.W.*



# CAVENDISH SOCIETY PUBLICATIONS.

---

THE following Works can now be had of HARRISON and SONS, 95, Pall Mall, at the prices affixed:—

HAND-BOOK OF CHEMISTRY, by LEOPOLD GMELIN, translated and edited by HENRY WATTS, B.A., F.R.S.

INORGANIC CHEMISTRY. 6 vols., demy 8vo, cloth. Some of these volumes are out of print. A new edition of vol. 1, and a few of vols. 4, 5, and 6, can be had to complete sets, 10s. 6d. each.

ORGANIC CHEMISTRY. 12 vols., demy 8vo, cloth, complete for £4 4s.; separate vols., 10s. 6d.

LIFE AND WORKS OF CAVENDISH, by Dr. GEORGE WILSON. 1 vol., demy 8vo, cloth 7s.

LIFE AND SCIENTIFIC RESEARCHES OF DALTON, by Dr. W. C. HENRY. 1 vol., demy 8vo, cloth, 7s.

LAURENT'S CHEMICAL METHOD, translated by Dr. OLDING, F.R.S. 1 vol., demy 8vo, cloth, 7s.

ELEMENTS OF CHEMICAL AND PHYSICAL GEOLOGY, by GUSTAV BISCHOF, Ph.D. Edited, and in part translated from the Manuscript of the Author, by BENJ. H. PAUL, Ph.D. 3 vols., demy 8vo, cloth, £1 11s. 6d.

LEHMANN'S PHYSIOLOGICAL CHEMISTRY, translated and edited by Dr. G. E. DAY, F.R.S. *The first volume of this work is out of print.* The 2nd and 3rd vols., demy 8vo, cloth, 7s. each.

DR. OTTO FUNKE'S ATLAS OF PHYSIOLOGICAL PLATES. 7s.

---

HARRISON AND SONS,

BOOKSELLERS TO HER MAJESTY AND H.R.H. THE PRINCE OF WALES.

59, PALL MALL, LONDON, S.W.



# INDEX

TO

## GMELIN'S HANDBOOK

OF

## CHEMISTRY.

BY

HENRY WATTS, B.A., F.R.S., F.C.S.,

*Editor of the Journal of the Chemical Society.*

---

LONDON:

HARRISON, 59, PALL MALL,

BOOKSELLER TO HER MAJESTY, AND H.R.H. THE PRINCE OF WALES.

---

1872.



LONDON :

HARRISON AND SONS, PRINTERS IN ORDINARY TO HER MAJESTY ST. MARTIN'S LANE.





# INDEX

TO

## GMELIN'S HANDBOOK OF CHEMISTRY.

N.B. *The figures in thick type denote the volumes.*

### A.

<i>Abies balsamea</i> , Turpentine from....	18, 19	Acetamide, compounds of	12, 543
<i>Abies excelsa</i> , Oil from the seeds of	16, 316	"    preparation of, from acetate of ammonia	12, 543
"    Turpentine from	18, 18	"    with Biacetamide	12, 546
<i>Abies pectinata</i> , Turpentine from	18, 18	Acetanilide	11, 314
Abietate of Ethyl	18, 7	Acetate, Acetic	8, 334
Abietates, metallic	18, 5	"    of Allyl....	10, 543; 13, 544
Abietic acid, formation of Sylvic acid from	17, 318	"    Alumina	8, 303; 13, 443
Abietic Anhydride	18, 8	"    Amarine	12, 197
Abietin	18, 7, 18	"    Ammonia	8, 294
Abietinic Acid	18, 18	"    Amyl	11, 69
Absolute strength of Affinity	1, 136	"    Aniline	11, 262
"    zero of Heat	1, 302	"    Atropine	16, 455
Absorbent earths	3, 133	"    Auric	8, 334
Absorption, compounds formed by	1, 86	"    of Baryta	8, 301
"    of Heat	1, 213	"    Benzidine	11, 340
"    Heat accompanying vaporization	1, 272	"    Benzyl	12, 52
"    Light	1, 165	"    Benzylene	12, 224
Absynthiin	17, 354	"    Berberine	17, 195
Acacia, Oil of	14, 356	"    Biamidobenzoic Acid	12, 150
Acechloride of Platinum	9, 31	"    Bichloromethylic	9, 231
Acediamine	12, 546	"    Bichlorovinic	9, 235
Acediamine: Hydrochlorate	13, 535	"    of Bismuth	8, 308
<i>Aceite d'Amacey</i>	14, 356	"    Butyl	10, 107
Acephalæ, Byssus of	18, 372	"    Cadmium	8, 310
Acephoric Acid....	9, 6	"    Capryl	13, 200, 587
Acephosgenic Acid	9, 7	"    Cerium	8, 303
Aceplatinous Oxide	9, 37	"    Cetyl	16, 375
Acetal .... 9, 38; 12, 519; 13, 452, 455, 476		"    Chelerythrine	17, 159
"    formation of Aldehyde from	13, 437	"    Chelidonine....	17, 166
Acetamidate of Mercury	12, 545	"    Cholesteryl	18, 117
"    Silver	12, 545	"    Chromic	8, 306
Acetamide	9, 246; 13, 535	"    Chromous	8, 305
		"    of Cinchonidine	17, 227, 229, 613
		"    Cinchonine	17, 216
		"    Cobalt	8, 322
		"    Cocaine	16, 303
		"    Codeine	17, 36

B



Acetate of Corydaline ....	17, 609	Acetate of Morphine ....	16, 434
„ Cuminic ....	14, 156	„ Narcotine ....	15, 145
„ of Cumoglycol ....	14, 153	„ Nickel ....	8, 323
„ Cumylene ....	14, 153	„ Nicotine ....	14, 231
„ Cupric oxide ....	8, 323	„ Nitroharmaline ....	16, 125
„ Cupric oxide and ammonia ....	8, 326	„ Oxyacanthine ....	17, 199
„ Cupric oxide and lime ....	8, 328	„ Phloramine ....	15, 71
„ Cupric, with mercuric chloride ....	8, 332	„ Perchloromethylic ....	9, 233
„ Cuprous ....	8, 323	„ Perchlorovinic ....	9, 240
„ of Cyanethine ....	13, 237	„ of Picoline ....	11, 271
„ Ethyl ....	8, 493	„ Platinous ....	8, 334
„ Ethyl, action of terchloride of phosphorus on ....	10, 488	„ of Potash ....	8, 297
„ Ethyl, decomposition of, by potassium ....	8, 499	„ Potash, emission of light in the crystallisation of ....	1, 208
„ Ethylene ....	12, 502	„ Quadrichlorovinic ....	9, 238
„ Ethylene, basic ? ....	13, 430	„ of Quinidine ....	17, 301
„ Ethylstrychnine ....	17, 512	„ Quinine ....	17, 289
„ Ferric ....	8, 320 ; 13, 446	„ Quintichlorovinic ....	9, 238
„ Ferroso-ferric, use of crude, for steeping wood ....	7, 113	„ of Rhodium ....	8, 334
„ Ferrous ....	8, 320	„ Salicylous acid ....	12, 245
„ of Furfurine ....	10, 381	„ Septichlorovinic ....	9, 239
„ Glucina ....	8, 303	„ Sextichlorovinic ....	9, 238
„ Glycol ....	12, 502	„ of Silver ....	8, 333
„ Gold ....	8, 334	„ Solanine ....	18, 97
„ Harmaline ....	16, 119	Acetates of Soda ....	8, 299
„ Harmine ....	16, 107, 111	Acetate of Soda with mercuric cyanide ....	8, 333
„ Hydrargethyl ....	10, 532	„ Stannethyl ....	9, 99
„ Iron ....	8, 320	Acetates, Stannous and Stannic ....	8, 310
„ Iron, action of heat on ....	10, 512	Acetate of Stibethyl ....	10, 527
„ Jamaïcine ....	17, 315	„ Stibmethylethylum ....	13, 502
„ Lanthanum ....	8, 303 ; 12, 512	„ Strontia ....	8, 302
„ Lead ....	8, 310, 316	„ Strychnine ....	17, 502
„ Lead, neutral, compound of, with anacardate of lead ....	17, 521	„ Sycoceryl ....	17, 44
„ Lead, neutral, electrolysis of ....	1, 463	„ Terchloromethylic ....	9, 232
„ Lime ....	8, 302	„ Terchlorovinic ....	9, 237
„ Lithia ....	8, 300	„ of Thorina ....	8, 305
„ Magnesia ....	8, 303	Acetates of Tin ....	8, 310
„ Manganous ....	8, 308	„ Titanium ....	8, 305
„ Mercuric ....	8, 332	Acetate, Uranic ....	8, 306
„ of Mercuric oxide and ammonia ....	8, 332	„ Uranous ....	8, 306
„ Mercuric, with mercuric cyanide ....	8, 332	Acetates of Uranium, double, 8, 307, 320, 333 ;	13, 442
„ Mercurous ....	8, 330	Acetate of Vanadium ....	8, 305
„ of Mercurous oxide and ammonia ....	8, 332	„ Yttria ....	8, 303
„ Methyl ....	8, 484	„ Zinc ....	8, 308
„ Methylene ....	13, 392	„ Zinco-uranic ....	8, 310
„ Methylstrychnine ....	17, 519	„ of Zirconia ....	8, 305
„ Molybdenum ....	8, 305	Acetates, Metallic ....	8, 294
		Acetic Acetate ....	8, 334
		Acetic Acid ....	12, 512
		„ aqueous ....	8, 293
		„ anhydrous ....	8, 334
		„ combinations of ....	8, 291
		„ decompositions of ....	8, 291
		„ expansion of, by heat ....	1, 231
		„ formation of ....	8, 283

- Acetic Acid, formation of Marsh-gas by heating, with a fixed alkali .... 7, 252  
 „ glacial, impurities of 8, 287  
 „ glacial, percentage of, in aqueous acetic acid .... 8, 293  
 „ glacial, preparation of 8, 287  
 „ glacial, properties of 8, 290  
 „ impurities in .... 8, 289  
 „ literature of .... 8, 282  
 „ natural formation of 13, 442  
 „ occurrence of, in turpentine-water .... 13, 442  
 „ preparation .... 8, 284  
 „ production of Methyl by electrolysis of.... .... 7, 247  
 „ sources of .... 8, 283  
 „ supposed relative position of atoms in 7, 33  
 „ synthesis of .... 13, 442  
 Acetic Anhydride .... 8, 334  
 „ compound of with Aldehyde 13, 440  
 Acetic Ether .... 8, 493  
 „ action of Chlorine on 13, 534  
 Acetic Salicylate .... 12, 282  
 Acetin .... 9, 496  
 Acetins, Glycolic .... 13, 429  
 Aceto-arsenate, Cupric .... 8, 329  
 Aceto-benzoate of Lead .... 12, 42  
 Acetobenzoic Ether .... 12, 52  
 Acetobenzolic Ether .... 12, 223  
 Acetobutyrate of Ethylene .... 13, 433  
 Acetobutyryn, Glycolic .... 13, 433  
 Acetochlorhydrin 9, 498; 13, 579  
 Acetochlorobromhydrin .... 13, 580  
 Aceto-cinnamic Anhydride .... 13, 293  
 Acetocuminic Anhydride .... 14, 156  
 Acetodichlorhydrin .... 13, 579  
 Acetoglucose .... 15, 331  
 Acetokinate of Lead .... 16, 231  
 Acetomannitan.... .... 15, 375  
 Acetomyristate of Lead .... 16, 213  
 Acetone .... 9, 1  
 „ and Ammonia, with Tannic acid.... .... 15, 472  
 „ bichlorinated.... .... 13, 464  
 „ brominated .... 13, 464  
 „ combinations of .... 9, 16  
 „ compound of, with bisulphite of ammonia .... 13, 469  
 „ compounds of, with alkaline bisulphites .... 10, 522  
 „ constitution of 9, 4; 13, 462  
 „ decomposition of, by ammonia .... 9, 10  
 Acetone, decomposition of, by ammonia and sulphide of carbon ... 9, 14  
 „ decomposition of, by ammonia and sulphur 9, 12  
 „ decomposition of, by ammonia and sulphuretted hydrogen .... 9, 14  
 „ decomposition of, by bichloride of platinum 9, 10  
 „ decomposition of, by bichromate of potash 9, 10  
 „ decomposition of, by bromine .... 9, 5  
 „ decomposition of, by chlorine .... 9, 4  
 „ decomposition of, by combustion.... .... 9, 4  
 „ decomposition of, by hydrate of potash .... 9, 14  
 „ decomposition of, by hydrochloric acid .... 9, 8  
 „ decomposition of, by iodic acid .... 9, 8  
 „ decomposition of, by iodine and phosphorus 9, 9  
 „ decomposition of, by nitric acid 9, 8; 13, 468  
 „ decomposition of, by oil of vitriol .... 9, 8  
 „ decomposition of, by pentachloride of phosphorus .... 9, 9; 13, 468  
 „ decomposition of, by phosphoric acid .... 9, 9  
 „ decomposition of, by phosphorus.... .... 9, 5  
 „ decomposition of, by potassium and sodium 9, 15; 13, 469  
 „ decomposition of, by quick lime 9, 16; 13, 471  
 „ decomposition of, by red heat .... 9, 4  
 „ expansion of, by heat 1, 231  
 „ formation of .... 9, 1  
 „ formation of Marsh-gas by heating with a fixed alkali.... .... 7, 252  
 „ Hexchlorinated 9, 5; 13, 467  
 „ insoluble compound of, containing carbon and phosphorus .... 9, 7  
 „ Monochlorinated .... 13, 463  
 „ Pentachlorinated 9, 5; 13, 465  
 „ preparation of .... 9, 1  
 „ properties of .... 9, 3  
 „ solution of Turpentine oil in .... 14, 271



Acetone, solution of Volatile oils				Acetyl-chrysophanic Acid	.... 16, 177
in ....	.... 7, 169			Acetyl-cinchonine	.... 17, 234
,, Trichlorinated	.... 13, 465			Acetylene, compound of, with	
Acetones	.... 7, 44, 214			hæmoglobin	.... 18, 395
Acetonic acid	.... 9, 37; 13, 473			Acetylia	.... 13, 485
Acetonine	.... 9, 10; 13, 378			Acetylium	.... 10, 537
Acetonitrile of Baryta	.... 13, 443			Acetyl-mercaptan	.... 8, 350
Acetonitrile of Strontia	.... 13, 443			Acetyl-neurine	.... 18, 382
Acetonitrile	.... 9, 294			Acetyl-phloroglucin	.... 15, 71
,, action of fuming sul-				Acetyl-urea	.... 9, 292
phuric acid on	.... 12, 485			<i>Achillea Millefolium</i> , Ferment-oil	
,, preparation of	.... 12, 542			of	.... 14, 406
,, relation of, to Ful-				Achillein	.... 18, 212
minic acid	.... 12, 553			Achmite	.... 5, 286
Acetonyl	.... 9, 14			Acid, Abietic	.... 18, 2
Acetonylamide	.... 9, 14			,, Abietinic	.... 18, 18
Acetopropionate of Silver	.... 9, 408			,, Aboleic (of Berzelius)	.... 12, 451
,, of Soda	.... 9, 405			,, Acephoric	.... 9, 6
Acetosalicyl	.... 12, 245; 13, 242			,, Acephosgenic	.... 9, 7
Acetostannethyl	.... 9, 101			,, Acetic	.... 8, 282; 12, 512
Acetosylamine	.... 12, 541			,, Acetonic	.... 9, 37; 13, 475
Acetothujenin	.... 16, 246			,, Acetosaccharic	.... 9, 258
<i>Acetum concentratum</i>	.... 8, 284			,, Acetylchrysophanic	.... 16, 177
<i>Acetum crudum</i>	.... 8, 284			,, Aconitanilic	.... 11, 408
<i>Acetum destillatum</i>	.... 8, 284			,, Aconitic	.... 11, 402
<i>Acetum Lythargyri</i>	.... 8, 314			,, Acrylic	.... 9, 369
<i>Acetum radicale</i>	.... 8, 282			,, Adipic	.... 11, 422
<i>Acetum Saturni</i>	.... 8, 314			,, Aesciglycollic	.... 18, 43
Acetureide	.... 9, 292			,, Aesciglyoxalic	.... 18, 43
Acetyl, Benzoyl, and Sulphophenyl,				,, Aescinic	.... 18, 35
Nitride of	.... 12, 159			,, Aescioxalic	.... 18, 44
,, Bromide	.... 9, 187; 10, 536			,, Albuminic	.... 18, 302
,, Bromide, action of, on				,, Albumin-sulphuric	.... 18, 289
glycerin	.... 13, 580			,, Aldehydic	.... 8, 181
,, Bromide, expansion of, by				,, Allanturic ?	.... 9, 447
heat	.... 1, 227, 229			,, Allituric ?	.... 9, 443
,, Chloride	.... 9, 191; 10, 536			,, Allophanic	.... 9, 266
,, Chloride, action of, on				,, Alloxanic	.... 10, 160, 565
anhydrous sulphuric				,, Allyl-sulphuric	.... 13, 543
acid	.... 13, 455			,, Allylxanthic	.... 13, 544
,, Chloride, compound of,				,, Aloeretic	.... 12, 9
with aldehyde	.... 13, 441			,, Aloetic	.... 12, 1, 10
,, Chloride, expansion of, by				,, Aloisic ?	.... 13, 216
heat	.... 1, 227, 229			,, Alphajalapic	.... 16, 411
,, Chloride, produced by the				,, Alpha-orsellesic	.... 12, 371
action of chlorine on				,, Alpha-orsellie	.... 12, 371
aldehyde	.... 12, 533			,, Alphotoluic	.... 17, 151
,, Chloride, reaction of, with				,, Althionic	.... 8, 431
sulphocyanide of potas-				,, Amalic	.... 11, 433
sium	.... 10, 521			,, Amidanasic	.... 13, 143
,, Iodide	.... 9, 185; 10, 537; 12, 531			,, Amidobenzoic	.... 12, 142
,, Perchloride	.... 9, 194			,, Amidocuminic	.... 14, 174
,, Peroxide	.... 13, 446			,, Amidonitroxanilic	.... 11, 313
,, Salicylide	.... 12, 240			,, Amidoxypionic	.... 18, 368
,, Sulphide	.... 9, 35			,, Ampelic	.... 12, 272
,, Thiacetate	.... 9, 306			,, Amygdalic	.... 15, 429
Acetyl-æsculetin	.... 16, 26			,, Amylomalic	.... 11, 79
Acetylamine	.... 12, 541			,, Amyloxalic	.... 11, 73
Acetyl-benzoin	.... 12, 175			,, Amylphloretic	.... 13, 315

Acid, Amylphosphoric ....	11, 49	Acid, Benzænanthylie, anhy-	
„ Amylphosphorous ....	11, 48	drous ....	12, 462
„ Amylsalicylic ....	12, 260	„ Benzoglycolic ....	12, 64
„ Amylsulphuric ....	11, 55	„ Benzoic ....	12, 32
„ Amylsulphurous ....	11, 50	„ Benzoic, anhydrous ....	12, 93
„ Amyltartaric ....	11, 80	„ Benzolactic ....	12, 92
„ Amylxanthic ....	11, 60	„ Benzonitrobenzoic, anhy-	
„ Anacardic ....	17, 519	drous ....	12, 137
„ Anachuita-tannic ....	15, 511	„ Benzosulphuric ....	11, 155
„ Anchoic ....	13, 374	„ Benzo-valeric, anhydrous	12, 96
„ Anemonic ....	16, 268	„ Benzoylsalicylamic ....	12, 324
„ Angelic ....	10, 410	„ Beta-orsellesic ....	12, 371
„ „ anhydrous ....	10, 416	„ Beta-orsellie 12, 371, 377; 16,	295
„ Anilic ....	12, 306	„ Betuloretic ....	17, 403
„ Anilocyanic ....	11, 301	„ Biacetoquercetic ....	16, 489
„ Anilotic ....	12, 306	„ Biamidobenzoic ....	12, 149
„ Anisamic....	13, 142	„ Biamidocuminic ....	14, 176
„ Anisic ....	13, 123	„ Biamidomeconic ....	12, 435
„ Anisoic ....	14, 503	„ Bibromacetic 12, 538; 13,	531
„ Aniso-nitranisic ....	13, 140	„ Bibromisatic ....	13, 71
„ Anisuric ....	13, 241	„ Bibromisatosulphurous ....	13, 72
„ Anisyous ....	13, 120	„ Bibromobutyric ....	10, 136
„ Anitrohumic ....	17, 474	„ Bibromocarbolie ....	11, 168
„ Anthranilic ....	12, 326	„ Bibromonaphthylodithionic	14, 33
„ Anthropic ....	16, 365	„ Bibromophloretic ....	13, 330
„ Antimonic ....	4, 330	„ Bibromosalicylic....	12, 287
„ Antimonious ....	4, 329	„ Bibromostearic ....	17, 146
„ Antitartaric ....	10, 365	„ Bibromosulphonaphthalic	14, 33
„ Apocrenic 15, 158; 17,	469	„ Bichlorisamic ....	13, 113
„ Apocrenic (Mulder's) ....	17, 473	„ Bichlorisatic ....	13, 79
„ Apoglucic ....	13, 365	„ Bichlorisatosulphurous ....	13, 81
„ Apophyllic ....	13, 154	„ Bichlorisatydic ....	13, 103
„ Arabic ....	15, 194	„ Bichlorobutyric ....	10, 140
„ Arachidic ....	17, 370	„ Bichlorocarbolie ....	11, 179
„ Araucaric ....	18, 20	„ Bichlorofilipelosic ....	15, 31
„ Argentoprussic ....	8, 28	„ Bichloronaphthylodithionic	14, 45
„ Arsenic ....	4, 262	„ Bichlorophthalic....	13, 17
„ Arsenious ....	4, 253	„ Bichloropteritannic acid....	15, 502
„ Arseniovinic ? ....	8, 481	„ Bichlorosalicylic ....	12, 298
„ Arsenmethylic ....	13, 496	„ Bichlorosalicylous ....	12, 297
„ Arvic ....	17, 474	„ Bichlorosulphonaphthalic	14, 45
„ Aspartic....	10, 230	„ Bichloro-sulphosomethylic	7, 302
„ Atherospermatannic ....	15, 514	„ Bichlorotannaspidic ....	15, 497
„ Atropic ....	16, 458	„ Biethylecyanuric ....	13, 564
„ Auric ....	6, 207	„ Biethylmeconic ....	12, 433
„ Axinic 16, 317; 17,	46	„ Biethylphosphoric ....	8, 401
„ Azelaic ....	17, 79	„ Biliary, from guano ....	18, 69
„ Azoleic ....	12, 451	„ Bimethyleitric ? ....	11, 463
„ Azulinic ....	11, 375	„ Binitrobenzoic ....	12, 134
„ Azulmic (Braconnot's) ....	17, 476	„ Binitrobromocarbolie ....	11, 208
„ Bassic ....	16, 365	„ Binitrocarbolic ....	11, 205
„ Bebiric ....	17, 173	„ Binitrocuminic ....	14, 171
„ Benic ....	17, 558	„ Binitrodiphenamic ....	11, 345
„ Benic (Walter's) ....	16, 365	„ Binitro-ethylic ....	12, 555
„ Benz-acetic, anhydrous ....	12, 95	„ Binitrogentianic....	16, 182
„ Benzamic ....	12, 142	„ Binitrometholic ....	12, 494
„ Benzhydrolic ....	17, 395	„ Binitrophloretic ....	13, 331
„ Benzilic ....	12, 182	„ Binitrosalicylic ....	12, 313
„ Benzimic ....	12, 146	„ Binitrosulphonaphthalic....	14, 87



Acid, Bismuthic	....	4, 432	Acid, Camphoranilic	....	14, 483
„ Bisulphanilic	....	11, 298	„ Camphoric	....	14, 455
„ Bisulphetholic	....	12, 516	„ Capric	....	14, 485
„ Bisulphethosulphuric	....	8, 411	„ Caproic	....	11, 414
„ Bisulphobenzolic	....	11, 156	„ Caprylic	....	13, 190
„ Bisulpho-hydrokinonic	....	16, 240	„ Capsulæscic	....	16, 151
„ Bisulphometholic	....	12, 484	„ Carbanilic	....	12, 143, 326
„ Bisulphonaphthalic	....	14, 21	„ Carbazotic	....	11, 212
„ Bithiobenzolic	....	11, 237	„ Carbobenzoic	....	12, 47
„ Boheic	....	12, 473	„ Carbohydrokinonic	....	16, 235
„ Boracic	....	2, 97	„ Carbohumic acid	....	17, 476
„ Bromacetic	....	12, 532	„ Carbolic	....	11, 139
„ Bromanilamic	....	11, 238	„ Carbomethylic	....	7, 290
„ Bromanilic	....	11, 171	„ Carbonic	....	2, 89
„ Bromanisic	....	13, 132	„ Carbo-ulmic	....	17, 476
„ Bromaniso-nitranisic	....	13, 141	„ Carbovinic	....	8, 394
„ Bromerucic	....	17, 560	„ Carminic	....	16, 205
„ Bromeuxanthic	....	17, 535	„ Carmufellic	....	14, 208
„ Bromic	....	2, 277	„ Catechutannic	....	15, 515
„ Bromisatic	....	13, 70	„ Cathartic	....	18, 241
„ Bromobenzoic	....	12, 107	„ Ceric	....	18, 160
„ Bromoboracic	....	2, 281	„ Ceropic	....	18, 16
„ Bromocarbolic	....	11, 168	„ Cerosic	....	18, 82
„ Bromocinnamic	....	13, 294	„ Cerotic	....	18, 134
„ Bromocomenic	....	11, 392	„ Cerotyl-sulphuric	....	18, 137
„ Bromoguaiaretic	....	17, 245	„ Cetie	....	16, 365
„ Bromoleic	....	17, 101	„ Cetraric	....	17, 21
„ Bromomethylselenious	....	10, 492	„ Cetylene-sulphuric	....	16, 370
„ Bromonaphthylodithionic, <i>see</i> Acid Bromosulpho- naphthalic.			„ Cetyl-xanthic	....	16, 371
„ Bromophenasic	....	11, 168	„ Cevadic	....	18, 186
„ Bromophenesic	....	11, 168	„ Chelidonic	....	12, 413
„ Bromophenisic	....	11, 170	„ Chenocholic	....	18, 130
„ Bromoplatinic	....	6, 292	„ Chiococcic	....	18, 142
„ Bromopropionic	....	9, 428	„ Chloracetamic	....	9, 272
„ Bromopyromeconic	....	10, 445	„ Chloracetic	....	12, 537
„ Bromosalicylic	....	12, 285	„ Chloranilamic	....	11, 239
„ Bromosalicylous	....	12, 284	„ Chloranilic	....	11, 190
„ Bromostannic	....	5, 84	„ Chloranisic	....	13, 135
„ Bromostannous	....	5, 84	„ Chloraniso-nitranisic	....	13, 142
„ Bromostearic	....	17, 145	„ Chlorazosuccic	....	10, 36
„ Bromosulphonaphthalic	....	14, 33	„ Chlorelayl-hyposulphuric	2, 340	
„ Brunolic	....	15, 163	„ Chloreuxanthic	....	17, 536
„ Butylsulphuric	....	10, 105	„ Chloric	....	2, 312
„ Butyracetic	10, 552; 13, 560		„ Chlorindoptenic	....	11, 181
„ Butyric	....	10, 77	„ Chlorisamic	....	13, 112
„ Butyric, anhydrous	....	10, 88	„ Chlorisatic	....	13, 75
„ Butyroleic	....	16, 365	„ Chlorisatosulphurous	....	13, 77
„ Butyrolimnodic, <i>see</i> Bog- butter.			„ Chlorisatydic	....	13, 101
„ Cacodylic	....	9, 327	„ Chlorobenzoic	....	12, 112
„ Caffic	....	15, 504	„ Chlorocarbethamic	....	9, 229
„ Caffetannic	....	15, 504	„ Chlorocarb-hyposulphuric	2, 340	
„ Cainic	....	18, 143	„ Chlorocerotie	....	18, 139
„ Callutannic	....	15, 514	„ Chlorocinnamic	....	13, 295
„ Camphic	....	14, 353	„ Chlorochromic	....	4, 135
„ Campholic	....	14, 453	„ Chlorocomenic	....	11, 390
„ Camphoramic	....	14, 481	„ Chlorœnanthic	....	12, 460
			„ Chlorofilicic	....	16, 128
			„ Chlorofilipelosic	....	15, 30
			„ Chloroform-hyposulphuric	2, 340	

Acid, Chlorohumic .... 17, 465	Acid, Citric .... 11, 436
„ Chlorohyposulphonaphthalic, <i>see</i> Acid, Chlorosulphonaphthalic.	„ Citridic .... 11, 402
„ Chlorohyposulphonaphthalic, <i>see</i> Acid Bichlorosulphonaphthalic.	„ Citrobianilic .... 11, 468
„ Chlorohyposulphonaphthalic, <i>see</i> Acid, Terechlorosulphonaphthalic.	„ Cobaltic ? .... 5, 328
„ Chloroleic .... 17, 101	„ Cocatannic .... 15, 518
„ Chloromethyloselenious .... 10, 492	„ brown, from the husks of Cocculus grains .... 14, 477
„ Chloronaphthalic .... 14, 65	„ Coculostearic .... 16, 365
„ Chloronaphthasic, <i>see</i> Chloronaphthalic acid.	„ Columbic .... 17, 529
„ Chloroniceic .... 11, 176	„ Comenamic .... 11, 393
„ Chloronitrobenzoic .... 12, 138	„ Comenic .... 11, 382
„ Chlorophenesic .... 11, 178	„ Convolvulic .... 16, 156
„ Chlorophenisic .... 11, 181	„ Convolvulinolic .... 16, 151
„ Chloroplatinic .... 6, 294	„ Copaivic .... 17, 326
„ Chloroplatinous .... 6, 293	„ Cornic .... 18, 221
„ Chloropropionic .... 13, 559	„ Cortepinitannic .... 15, 489
„ Chlororhodic .... 18, 416	„ Cotarnamic .... 16, 134
„ Chlorosalicylic .... 12, 296	„ Cotarnic .... 16, 134
„ Chlorosalicylous .... 12, 294	„ Coumaric .... 13, 317
„ Chlorostannic .... 5, 88	„ Crenic .... 15, 158; 17, 466
„ Chlorastannous .... 5, 84	„ Crenic (Mulder's) .... 17, 473
„ Chlorostearic .... 17, 146	„ Croconic .... 10, 388
„ Chlorosuccilic .... 9, 273	„ Cuminamic, <i>see</i> Acid Amidocuminic.
„ Chlorosulphobenzoic .... 12, 117	„ Cuminic .... 14, 148
„ Chlorosulphobenzolic .... 11, 175	„ Cuminuric .... 14, 160
„ Chlorosulphonaphthalic .... 14, 38	„ Cupric ? .... 5, 413
„ Chloro-sulphosomethylic 7, 301	„ Curic .... 18, 19
„ Chlorous .... 2, 305	„ Curiuvic .... 18, 20
„ Chloroxalovinic .... 9, 245	„ Cyameluric .... 9, 382
„ Chloroxynaphthalesic, <i>see</i> Acid, Perchloronaphthalic.	„ Cyanic .... 8, 61
„ Chlorosuccic .... 9, 429	„ „ with bitter almond oil .... 12, 28
„ Chloroxynaphthalic, <i>see</i> Acid, Chloronaphthalic.	„ Cyanuric .... 9, 449
„ Cholesteric .... 13, 157	„ Cyanylic .... 9, 461
„ Cholic .... 18, 46	„ Damaluric .... 12, 436
„ Choloïdanic .... 16, 412	„ Dialuric .... 10, 155
„ Choloïdic .... 18, 52	„ Digitalic .... 16, 339
„ Chromic .... 4, 116	„ Digitalinic .... 16, 339
„ Chrysammic .... 12, 1	„ Digitaloic .... 14, 529
„ Chrysanic .... 12, 329	„ Dilituric .... 10, 181
„ Chrysanisic .... 12, 302	„ Dinitrobenzoic .... 12, 134
„ Chrysatric .... 12, 12	„ Dinitro-ethyllic .... 12, 555
„ Chrysophanic 16, 171; 18, 241	„ Dinitro-methyllic .... 12, 494
„ Cimicic .... 16, 284	„ Dinitrophenyl-citraconamic 11, 325
„ Cinchonine-sulphuric .... 16, 232	„ Disulphometholic .... 12, 484
„ Cinchonatannic .... 15, 479	„ Dithiobenzolic .... 11, 237
„ Cinnamic .... 13, 268	„ Dithionaphthyllic, <i>see</i> Acid sulphonaphthalic.
„ Cissotannic .... 15, 516	„ Dithionic .... 2, 174
„ Citracobinitranilic .... 11, 325	„ Doeglic .... 17, 179
„ Citraconanilic .... 11, 323	„ Dracic .... 13, 123
„ Citraconic .... 10, 417	„ Draconic .... 13, 123
„ Citranilic .... 11, 465	„ Dulcitartaric .... 15, 388
	„ Elaidic .... 17, 74
	„ Elateric .... 17, 367
	„ Ellagic .... 16, 183
	„ Epiglycerobitartaric .... 13, 582
	„ Erucadic .... 17, 552



Acid, Erucic ....	17, 549	Acid, Gallic ....	12, 396
„ Erythric ....	12, 381	„ Gallotannic ....	15, 449
„ Erythroleic ....	12, 359	„ Gambodie ....	17, 416
„ Etheric ....	8, 180	„ Gardeniatannic ....	15, 520
„ Ethionic ....	8, 432	„ Gentianic ....	16, 178
„ Ethylbibromosalicylic ....	12, 290	„ Geoceric ....	17, 445; 18, 141
„ Ethylbichlorosalicylic ....	12, 299	„ Georetic ....	17, 444
„ Ethylbinitrophoretic ....	13, 333	„ Gingkoic ....	18, 82
„ Ethylbinitrosalicylic ....	12, 319	„ Glaucomelanic ....	15, 14
„ Ethylbromosalicylic ....	12, 286	„ Globularitannic ....	16, 83
„ Ethylcamphoric ....	14, 465	„ Glucic ....	13, 237
„ Ethylcarbohydrokinonic ....	16, 240	„ Glucohexacitric ....	15, 334
„ Ethylcomenic ....	11, 389	„ Glucosuccinic ....	15, 333
„ Ethylhemipinic ....	14, 434	„ Glucotetratartaric ....	15, 333
„ Ethylmeconic ....	12, 431	„ Glutamic ....	18, 437
„ Ethylmucic ....	11, 511	„ Glyceric ....	13, 568
„ Ethylnitrosalicylic ....	12, 312	„ Glycerobitartrac ....	13, 582
„ Ethyloxamic ....	9, 262	„ Glycerocitric ....	13, 583
„ Ethylphoretic ....	13, 314	„ Glyceromonotartaric ....	13, 581
„ Ethylphosphoric 8, 399; 13, 456		„ Glycerosuccinic ....	13, 581
„ Ethylphosphorous ....	8, 397	„ Glycerotertartaric ....	13, 582
„ Ethylpteritannic ....	15, 503	„ Glyceroxalic ....	13, 581
„ Ethylsalicylamic ....	12, 323	„ Glycocholic ....	18, 56
„ Ethylsalicylic ....	12, 259	„ Glycocholonie ....	18, 62
„ Ethylsulphobenzoic ....	12, 63	„ Glycolic ....	12, 508; 13, 535
„ Ethylsulphuric ....	8, 415	„ Glyoxylic ....	12, 505; 13, 434
„ Ethylsulphurous ....	8, 408	„ Graphitic ....	14, 517
„ Ethyltannaspidic ....	15, 499	„ Gratioloic ....	16, 471
„ Ethyltrithionic ....	12, 513	„ Guaiacic ....	11, 397; 17, 252
„ Euchroic ....	10, 18	„ Guaiaconic ....	17, 155
„ Eugenic ....	14, 201	„ Guaiaretic ....	17, 241
„ Euphrasiatannic ....	15, 518	„ Gurgunic ....	17, 545
„ Euxanthic 15, 343; 17, 530		„ Gyrophoric ....	16, 295
„ Evernic ....	16, 443	„ Hederic ....	15, 527
„ Everninic ....	16, 445	„ Hederitannic ....	15, 527
„ Evernitic ....	16, 547	„ Helianthic, or Heliantho-	
„ of Faraday's smouldering		tannic ....	15, 345, 522
baryta-salt ....	14, 20	„ Hemipinic ....	14, 430
„ Fatty, C <sup>38</sup> H <sup>80</sup> O <sup>4</sup> ....	17, 181	„ „ acid produced	
„ Ferric ? ....	5, 201	by decomposi-	
„ Ferriprussic ....	7, 449	tion of ....	14, 432
„ Ferroprussic ....	7, 429	„ Hippuric ....	12, 69
„ Filicic ....	16, 126	„ Hircic ....	10, 89
„ Filimelisisulphuric ....	15, 26	„ Hordeic ....	15, 49
„ Filinoleic ....	18, 74	„ Humic ....	17, 458, 478
„ Filipelosic ....	15, 25	„ Humin-nitric ....	17, 461
„ Flavindic ....	13, 91	„ Humocrenic ....	17, 466, 475
„ Fluoboric ....	2, 363	„ Humopic ....	16, 145
„ Formic ....	7, 268	„ Hyænic ....	18, 106
„ Formobenzoic ....	12, 57	„ Hydantoic ? ....	10, 250
„ Fulminic ....	9, 295; 12, 551	„ Hydrabietic ....	18, 8
„ Fulminuric ....	10, 556	„ Hydriodic ....	2, 261
„ Fumaric ....	10, 22	„ Hydriodous ....	2, 261
„ Fumic ....	17, 476	„ Hydrobromic ....	2, 279
„ Fungic ....	10, 227	„ Hydrobromous ....	2, 279
„ Gaedinic ....	16, 319	„ Hydrochloric ....	2, 319
„ Galitannic ....	15, 519	„ Hydrochloric, solubility of	
„ Gallactic ....	15, 229	silver chloride in ....	6, 428
„ Gallamic ....	12, 435	„ Hydrochlorosaccharic ....	9, 252

Acid, Hydrochromocyanic ....	7, 420	Acid, Iodacetic ....	13, 529
„ Hydrocobaltidecyanic ....	7, 492	„ Iodic ....	2, 253
„ Hydrocyanic ....	7, 378, 389	„ Iodocinnamic ....	13, 293
„ Hydrocyanic, with bitter		„ Iodomethyloselenious ....	10, 492
almond oil ....	12, 28	„ Iodoplatinic ....	6, 291
„ Hydroferriecyanic ....	7, 449	„ Iodoplatinous ....	6, 290
„ Hydroferrocyanic 7, 429; 9, 506		„ Iodopyromeconic ....	10, 443
„ Hydrofluoboric ....	2, 364	„ Iodosalicylous ....	12, 283
„ Hydrofluosilicic ....	3, 366	„ Iodostannic ....	5, 83
„ Hydroiridiocyanic ....	8, 60	„ Iodostannous ....	5, 82
„ Hydroleic ....	17, 89	„ Iodous ? ....	2, 252
„ Hydromargaric ....	17, 89	„ Ipecacuanhic ....	15, 523
„ Hydromargaritic acid ....	17, 88	„ Ipomæic ....	14, 493
„ Hydromellonic 9, 386; 10, 545		„ Isamic ....	13, 109
„ Hydropersulphocyanic ....	8, 103	„ Isatic ....	13, 54
„ Hydropiperic ....	15, 11	„ Isatinamic ....	13, 109
„ Hydroplatinocyanic ? ....	8, 44	„ Isatosulphurous ....	13, 56
„ Hydroselenic ....	2, 241	„ Isethionic 8, 428; 10, 518	
„ Hydroselenocyanic ....	8, 122	„ Isobiglycolethylenic ....	15, 232
„ Hydrosulphocyanic ....	8, 70	„ Isocetic ....	16, 365
„ Hydrosulphomellonic		„ Isotartaric ....	10, 330
9, 472; 10, 548		„ Itaconanilic ....	11, 324
„ Hydrosulphocarbonic ....	2, 206	„ Itaconic ....	10, 424
„ Hydrosulphuric ....	2, 195	„ Jalapic ....	16, 408
„ Hydrosulphurous ....	2, 193	„ Jalapinolic ....	16, 400
„ Hydrotelluric ....	4, 404	„ Japonic ....	12, 394
„ Hydrothiocyanic....	8, 113	„ Kalisaccharic ....	13, 237
„ Hydrothio-sulphoprussic	8, 98	„ Kinic ....	16, 222
„ Hydroxalic ....	11, 513	„ Kinotannic ....	15, 525
„ Hydurilic ....	10, 158	„ Kinovatannic ....	15, 346
„ Hyocholic ....	18, 100	„ Kinovic 15, 345; 18, 24	
„ Hyoglycocholic ....	18, 101	„ Kinovous ....	15, 32
„ Hyperspiroylic ....	12, 246	„ Lactamic ....	11, 471
„ Hypoacetylous .... 8, 499; 9, 43		„ Lactic ....	11, 472
„ Hypobenzoylous ....	12, 48	„ Lactic, anhydrous 11, 435, 501	
„ Hypobromous ? ....	2, 276	„ Lactucic ....	16, 278
„ Hypochloric ....	2, 309	„ Laevo-camphoric ....	14, 463
„ Hypochlorous ....	2, 294	„ Lævoracemic ....	10, 365
„ Hypogaëic ....	16, 317	„ Lævotartaric ....	10, 365
„ Hyponitric ....	2, 380	„ Lampic ....	8, 180
„ Hypophosphorous ....	2, 113	„ Lantanuric ? ....	9, 445
„ Hypopicrotoxic ....	14, 477	„ Lauric ....	15, 43
„ Hyposulpharsenious ....	4, 271	„ Laurostearic, see Acid,	
„ Hyposulphindigotic ....	13, 45	Lauric.	
„ Hyposulphoglutic ....	14, 23	„ Lecanoric ....	12, 377
„ Hyposulphonaphthalic, see		„ Leditannic ....	15, 527
Acids, Sulphonaphthalic		„ Lepargylic ....	13, 374
and Bisulphonaphthalic.		„ Leucic ....	15, 58, 536
„ Hyposulphophosphoric ....	2, 212	„ Leucoturic ....	9, 444
„ Hyposulphophosphorous....	2, 209	„ Lichenic ....	16, 195
„ Hyposulphuric ....	2, 174	„ Lignosulphuric ....	15, 164
„ Hyposulphurous ....	2, 160	„ Lignohumic ....	17, 474
„ Igasuric ....	10, 229	„ Limettic ....	14, 519
„ Illicic ....	16, 511	„ Linoleic ....	16, 305
„ Imasatic....	13, 109	„ Lipic ....	10, 434
„ Indigotic ....	12, 306	„ Lithic ....	10, 456
„ Inosinic ....	11, 119	„ Lithofellic ....	17, 375
„ Insolinic ....	13, 318	„ Lizaric, see Alizarin.	



Acid, Madic ....	16, 366	Acid, Methylselenious ....	10, 491
„ Malamylic ....	11, 79	„ Methylternitrosalicylic ....	12, 319
„ Malanilic ....	11, 320	„ Methyltetrasulphuric	10, 497; 12, 484
„ Maleic ....	8, 151	„ Metoleic ....	17, 88
„ Malic ....	10, 205	„ Molybdic ....	4, 55
„ Malomethylic ....	10, 227	„ Molybdic, with Fluxes, be-	
„ Malonic ....	13, 560	haviour of ....	4, 73
„ Malovinic ....	10, 227	„ Molybdic, sulphates of ....	4, 62
„ Mandelic ....	12, 57	„ Monochloracetic 9, 192; 12, 537	
„ Manganic ....	4, 208	„ Monomethyleitric ....	11, 463
„ Mannitartaric ....	15, 377	„ Moringic ....	17, 74
„ Mannitic ....	15, 382	„ Morintannic ....	15, 473
„ Mannito-bisulphuric ....	15, 371	„ Mucic ....	11, 502
„ Mannito-tersulphuric ....	15, 371	„ $\text{Cl}^2\text{H}^4\text{Cl}^2\text{O}^8$ , formed by the	
„ Margaric ....	16, 472	action of $\text{PCl}^5$ on mucic	
„ Margarosulphuric ....	17, 88	acid ....	11, 523
„ Mechloic ....	14, 425	„ Mycomelic ....	10, 182
„ Meconamidic ....	12, 434	„ Myristic ....	16, 209
„ Meconic ....	12, 421	„ Myronic .... 10, 50; 15, 346, 418	
„ Meconic, crystallised ....	12, 426	„ Nanceic ....	11, 472
„ Meconin-hyponitric ....	14, 443	„ Naphthalocyanic ....	14, 118
„ Medullic ....	17, 540	„ Naphthalasulphocyanic ....	14, 119
„ Melampyrosulphuric ....	15, 392	„ Naphthesic ....	14, 27
„ Melanic ....	11, 163	„ Naphthionic ....	14, 110
„ Melanuric ....	10, 548	„ from Naphthylamine ....	13, 352
„ Melissic ....	18, 152	„ Narcotinic ....	16, 148
„ Melissa-sulphuric ....	18, 152	„ Narthecic ....	18, 236
„ Mellitic ....	10, 1	„ Nicotic ....	10, 229
„ Mesaconic ....	10, 427	„ Niobic ....	4, 16
„ Mesityl-hypophosphorous 9, 28		„ Nitranilic ....	12, 306
„ Mesityl-phosphoric .... 9, 29		„ Nitranisic ....	13, 137
„ Mesitylsulphuric	9, 29; 12, 518; 13, 344	„ Nitric ....	2, 386
„ Mesoxalic ....	9, 425	„ Nitrobenzoic ....	12, 122
„ Metacetic, or Metacetonic 9, 402		„ Nitrobenzoic, anhydrous.... 12, 137	
„ Metagallic ....	15, 458	„ Nitrobichlorocarbollic ....	11, 210
„ Metagummic ....	15, 205	„ Nitrobromophenismic ....	11, 208
„ Metalignohumic ....	17, 474	„ Nitrocapric ....	14, 500
„ Metamargaric ....	17, 88	„ Nitrocaprylic ....	13, 217
„ Metapectic ....	15, 411	„ Nitrocarbollic ....	11, 203
„ Metaphosphoric ....	2, 125	„ Nitrochloroniceic ....	11, 204
„ Metatartaric ....	10, 327	„ Nitrocholic ? ....	9, 503
„ Methionic 8, 435; 12, 484		„ Nitrocinnamic ....	13, 300
„ Methylbibromosalicylic ....	12, 289	„ Nitrococussic ....	13, 25
„ Methylbichlorosalicylic ....	12, 299	„ Nitroeuminic ....	14, 170
„ Methylbinitrosalicylic ....	12, 317	„ Nitrodracrylic ....	13, 23
„ Methylbithionic ....	12, 488	„ Nitro-euxanthic ....	17, 537
„ Methylbromosalicylic ....	12, 286	„ Nitrofrangulic ....	16, 79
„ Methylecamphoric ....	14, 463	„ Nitrohippuric ....	12, 129
„ Methylchlorosalicylic ....	12, 297	„ Nitrohydruilic ....	10, 159
„ Methylldithionic, <i>see</i> Acid,		„ Nitroleucic ....	11, 431
Methylbithionic.		„ Nitromaric ....	17, 325
„ Methylhyposulphuric ....	2, 341	„ Nitromuriatic ....	2, 476
„ Methylnitrosalicylic ....	12, 311	„ Nitronaphthylldithionic, <i>see</i>	
„ Methyloxamic ....	9, 261	Acid, Nitrosulphonaphthalic.	
„ Methylphosphoric ....	12, 482	„ Nitrophenesic ....	11, 205
„ Methylphosphorous ....	12, 481	„ Nitrophenismic ....	11, 212
„ Methylsalicylic ....	12, 255	„ Nitrophenylpyrotartramic 11, 329	

Acid, Nitrophthalic ....	13, 27	Acid, Parapectic ....	15, 810
„ Nitropicric ....	11, 212	„ Paratartaric ....	10, 346
„ Nitropropionic ....	9, 430	„ Paratartralic ....	10, 361
„ Nitroprussic ....	8, 129	„ Parellic ....	16, 298
„ Nitrosaccharic ....	9, 253	„ Pectic ....	15, 401
„ Nitrosalicylamic....	12, 333	„ Pectolactic ....	15, 231
„ Nitrosalicylic ....	12, 305	„ Pectosic ....	15, 400
„ Nitrosalicylic, hydrated....	12, 308	„ Pelargonic ....	13, 369
„ Nitrosalicylous ....	12, 304	„ Pelopic ....	4, 20
„ Nitrosopelargonic ....	13, 371	„ Pentathionic ....	2, 162
„ Nitrostilbic ....	12, 173	„ Perauric....	6, 209
„ Nitrosulphonaphthalic ....	14, 84	„ Perchloric ....	2, 316
„ Nitrosulphoxylic ....	13, 137	„ Perchloronaphthalic ....	14, 69
„ Nitrosulphuric ....	2, 444	„ Perchloroxynaphthalic, <i>see</i>	
„ Nitrotartaric ....	10, 345	Acid Perchloronaphthalic.	
„ Nitrotoluylic ....	13, 22	„ Perchromic ....	6, 120
„ Nitroveratric ....	13, 356	„ Periodic ....	2, 259
„ Nitrous ....	2, 380	„ Permanganic ....	4, 209
„ Nitroxybenzoic ....	12, 313	„ Permesitylo-sulphuric ....	9, 30
„ Œnanthic ....	12, 454	„ Persulphomolybdic ....	4, 61
„ Œnanthylic ....	12, 451	„ Peruric ....	10, 484
„ Œnanthylic, anhydrous ....	12, 462	„ Pervanadic ? ....	4, 89
„ Oleic ....	17, 62	„ Phenic ....	11, 139
„ Oleophosphoric ....	16, 483	„ Phenous....	11, 139
„ Oleosulphuric ....	17, 88	„ Phenyl-carbamic ....	12, 326
„ Ombellic ....	13, 123	„ Phenyl-citraconamic ....	11, 323
„ Opianic ....	14, 427	„ Phenyl-citramic ....	11, 465
„ Opiansulphurous ....	14, 426	„ Phenyl-citrobiamic ....	11, 468
„ Orsellic ....	12, 371	„ Phenyl-disulphamic ....	11, 298
„ Osmiamic ....	6, 413	„ Phenyl-disulphodiamic ....	11, 237
„ Osmic ....	6, 407	„ Phenyl-itaconamic ....	11, 324, 408
„ Oxalic ....	13, 514	„ Phenyl-sulphamic ....	11, 296
„ Oxalosaccharic ....	9, 259	„ Phenyl-phthalamic ....	13, 31
„ Oxalovinic ....	9, 183	„ Phenyl-pyrotartramic ....	11, 328
„ Oxaluric....	9, 440	„ Phloretamic ....	13, 335
„ Oxamic ....	9, 259; 13, 535	„ Phloretic ....	13, 307
„ Oxamylic ....	11, 73	„ Phocenic ....	11, 21
„ Oxanilic ....	11, 310	„ Phosphacetic ....	9, 6
„ Oxatolylic ....	17, 153	„ Phosphoglyceric....	9, 492
„ Oxuric ....	10, 169	„ Phosphoric ....	2, 121
„ Oxybenzoic ....	12, 273	„ Phosphorous ....	2, 115
„ Oxychlorocitric ....	11, 470	„ Phosphovinic ....	8, 399
„ Oxycuminic ....	14, 151	„ Phthalamic ....	13, 30
„ Oxyphenic ....	11, 379	„ Phthalic ....	13, 10
„ Oxypicric ....	11, 22	„ Phycic ....	18, 238
„ Oxypinitannic ....	15, 487	„ Physetoleic ....	16, 317
„ Oxyporphyrlic ....	17, 184	„ Pichuric, <i>see</i> Acid, Lauric.	
„ Oxysalicylic ....	16, 239	„ Picramic....	11, 243
„ Oxyxanthic ....	8, 461	„ Picric ....	11, 211
„ Palmic ....	16, 366	„ Pimaric ....	17, 323
„ Palmitic....	16, 350	„ Pimelic ....	12, 463
„ Palmitonic ....	16, 366	„ Pinic ....	18, 9
„ Papaveric ....	16, 128	„ Pinicortannic ....	15, 491
„ Parabanic ....	9, 442	„ Pinitannic ....	15, 488
„ Paracamphoric ....	14, 463	„ Pinitartaric ....	15, 214
„ Paracomenic ....	11, 410	„ Pinonic ....	18, 20
„ Paraglycocholic ....	18, 61	„ Piperic ....	15, 7
„ Paramidic ....	10, 20	„ Pipitzahoic ....	16, 264
„ Paramucic ....	11, 512	„ Pityxylonic ....	15, 493



Acid, Polychromatic ....	11, 1	Acid, Rheadic ....	16, 527
„ Polygalic, <i>see</i> Senegin.		„ Rhodizonic ....	10, 398
„ Porphyric ....	17, 183	„ Rhodotannic ....	15, 530
„ Propæscinic ....	18, 38	„ Rhustannic ....	15, 531
„ Propionic		„ Ricinelaidic ....	17, 135
9, 402 ; 10, 552 ; 13, 558		„ Ricinoleic ....	17, 131
„ Propyloxanthic ....	9, 399	„ Roccellic....	16, 474
„ Proteinchlorous ....	18, 265	„ Rosacic ....	10, 200
„ Protein-sulphuric ....	18, 257	„ Rosolic ....	11, 153
„ Protic ....	18, 335	„ Ruberythric ....	16, 42
„ Protocatechuic ....	16, 238	„ Rubiacic....	16, 50
„ Pseudoacetic ....	9, 414	„ Rubianic	15, 348 ; 16, 38
„ Pteritannic ....	15, 500	„ Rubic ....	12, 394
„ Purpuric....	10, 191	„ Rubichloric ....	16, 66
„ Pyrocitric ....	10, 417	„ Rubindenic ....	13, 109
„ Pyrogallic ....	11, 398	„ Rufigallic ....	12, 412
„ Pyroguacacic	12, 350 ; 17, 252	„ Rufimoric ....	15, 476
„ Pyroleic, <i>see</i> Acid, Sebacic.		„ Rubitannic ....	15, 532
„ Pyroligneous	7, 258 ; 15, 149	„ Ruthenic ....	6, 399
„ Pyrolivilic ....	14, 206	„ Rutic, <i>see</i> Rutin.	
„ Pyromaric ....	17, 325	„ Sabadillic ....	18, 186
„ Pyromeconic ....	10, 438	„ Saccharic ....	11, 513
„ Pyromellitic ....	10, 14	„ Saccharohumic ....	17, 474
„ Pyromoritannic ....	11, 379	„ St. Evre's, prepared from	
„ Pyromucic ....	10, 383	chloroniceic acid ....	10, 404
„ Pyrophosphoric ....	2, 126	„ Salicylamic ....	12, 320
„ Pyr racemic ....	9, 424	„ Salicylic....	12, 246
„ Pyroricinic ....	17, 142	„ Salicylic, anhydrous ....	12, 282
„ Pyrotartanilic ....	11, 328	„ Salicylous ....	12, 235
„ Pyrotartaric ....	11, 83	„ Salicylous, with alkaline	
„ Pyrotartaric, anhydrous....	11, 101	bisulphites ....	12, 241
„ Pyrotartonitrilic ....	11, 328	„ Salicyluric ....	12, 331
„ Pyrotartranilic ....	11, 328	„ Santalic ....	16, 259
„ Pyrotartronitrilic ....	11, 329	„ Sarcolactic ....	11, 498
„ Pyroterebilic ....	11, 422	„ Sebacic ....	14, 493
„ Pyruvic ....	9, 418	„ Sebamic ....	14, 501
„ Quadrichlorobutyric ....	10, 141	„ Selenic ....	2, 239
„ Quadrichloronaphthylodi-		„ Selenious ....	2, 236
thionic, <i>see</i> Acid, Qua-		„ Sinapic ....	14, 520
drichlorosulphonaph-		„ Sinapelic ....	17, 552
thalic.		„ Solaneic } <i>see</i> Potato-	
„ Quadrichlorosuccinic ....	10, 142	„ Solanostearic }     fat.	
„ Quadrichlorosulphonaph-		„ Spiroylic ....	12, 246
thalic ....	14, 62	„ Stannic ....	5, 71
„ Quadrichlorotannaspidic....	15, 499	„ Stannic : anomalous hy-	
„ Quadrichlorovalerianic ....	11, 103	drate of ....	5, 73
„ Quercetic ....	16, 488	„ Stannic : ordinary hy-	
„ Quercitartaric ....	15, 216	drate of ....	5, 74
„ Quercitric ....	16, 496	„ Stearic ....	17, 103
„ Quinine-sulphuric ....	17, 307	„ Stearidic....	17, 78
„ Quinovatannic ....	15, 484	„ Stearophanic ....	16, 366
„ Quintichlorocarbollic ....	11, 184	„ Stilbesic....	12, 181
„ Racemic ....	10, 346	„ Stilbic ....	12, 182
„ Racemic, anhydrous ....	10, 361	„ Stilbous ....	12, 178
„ Racemomethylic....	10, 362	„ Stillistearic ....	16, 366
„ Racemovinic ....	10, 363	„ Styphnic....	11, 228
„ Ratanhiatannic ....	15, 529	„ Suberamic ....	13, 221
„ Retene-bisulphuric ....	17, 12	„ Suberanilic ....	13, 222
„ Rhamnotannic ....	15, 530	„ Suberic ....	13, 204

Acid, Succinanilic ....	11, 317	Acid, Sulphorufic ....	13, 68
„ Succinic ....	10, 108	„ Sulphosaccharic ....	9, 252; 15, 530
„ Succinic, anhydrous ....	10, 135	„ Sulphosalicylic ....	12, 275
„ Sulphacetic ....	8, 436	„ Sulphosinapic ....	10, 33
„ Sulphacetothymic ....	14, 420	„ Sulphosomethylic ....	7, 295
„ Sulyhacetylic ....	8, 412	„ Sulphosomethylic, terchlo-	
„ Sulphallylic ....	13, 543	rinated ....	7, 351
„ Sulphamidonic ....	15, 104	„ Sulphostannic ....	5, 80
„ Sulphamylic ....	11, 55	„ Sulphostannous ....	5, 78
„ Sulphanilic ....	11, 296	„ Sulphosuccinic ....	10, 129
„ Sulphanisic ....	13, 128, 586	„ Sulphotelluric ....	4, 406
„ Sulphantimonie ....	4, 354	„ Sulphotellurous ....	4, 405
„ Sulphantimonious, amor-		„ Sulphoterebic ....	14, 277
phous ....	4, 340	„ Sulphothymic ....	14, 419
„ Sulphantimonious, crystal-		„ Sulphotoluic ....	12, 230
lised ....	4, 337	„ Sulphotungstic ....	4, 33
„ Sulpharsenic ....	4, 277	„ Sulphotungstous....	4, 32
„ Sulpharsenious ....	4, 273	„ Sulphovinic ....	8, 415
„ Sulphetheric ....	10, 518	„ Sulphovinic, formation of	
„ Sulphetherisulphuric ....	8, 435	from alcohol ....	8, 222
„ Sulphindigotic ....	13, 58	„ Sulphovinic, constitution	
„ Sulphisatanous ....	13, 105	of ....	10, 515
„ Sulphobenzoenic ....	12, 230	„ Sulphoviridic ....	13, 66
„ Sulphobenzoic ....	12, 53	„ Sulphoxanthic ....	8, 466
„ Sulphobenzolic ....	11, 155	„ Sulphoxyarsenic ....	4, 280
„ Sulphobenzovinic ....	12, 63	„ Sulphoxylic ....	13, 117
„ Sulphobutylic ....	10, 105	„ Sulphoxyphosphoric ....	2, 220
„ Sulphocamphoric ....	13, 379	„ Sulphuric ....	2, 175
„ Sulphocaprylic ....	13, 196	„ „ ethylated ....	13, 414
„ Sulphocarbomethylic ....	7, 298	„ Sulphurous ....	2, 168
„ Sulphocinnamic ....	13, 278	„ Sulphydric ....	2, 195
„ Sulphocumolic ....	13, 344	„ Sylvic ....	17, 318
„ Sulphocymenic or Sulpho-		„ Sylvinolic ....	18, 1
cymolic....	14, 188	„ Taigutic ....	16, 521
„ Sulphodracylic ....	12, 230	„ Tannaspidic ....	15, 496
„ Sulphoflavie ....	13, 68	„ Tannecortepinic ....	15, 492
„ Sulphofulvic ....	13, 68	„ Tannic ....	15, 449
„ Sulphoglyceric ....	9, 494	„ Tannic, from fruits ....	15, 519
„ Sulphoglycolic ....	13, 428	„ Tanningenic ....	12, 388
„ Sulphomesitylo-sulphuric	9, 30	„ Tannomelanic ....	12, 412
„ Sulphometanethic ....	14, 200	„ Tannopic....	15, 491
„ Sulphomethylic ....	7, 305	„ Tannoxylic ....	12, 437
„ Sulphonaphthalic ....	14, 13	„ Tantalic ....	4, 2
„ Sulphonaphthalidamic, <i>see</i>		„ „ Borate of ....	4, 4
Acid, Sulphonaphthylamic.		„ „ Hydrochlorate of	4, 6
„ Sulphonaphthoric, <i>see</i> Acid,		„ „ Hydrofluatate of ....	4, 8
Sulphonaphthalic.		„ „ Phosphate of ....	4, 4
„ Sulphonaphthylamic ....	14, 109	„ „ Sulphate of ....	4, 5
„ Sulphophenic ....	11, 157	„ Tantalous ....	4, 2
„ Sulphophenylbenzoic ....	12, 158	„ „ containing Tung-	
„ Sulphophenylic....	11, 155	sten ....	4, 45
„ Sulphophloretic ....	13, 313	„ Tartaric ....	10, 265
„ Sulphophoenicic ....	13, 95	„ „ Anhydrous ....	10, 337
„ Sulphophosphoric ....	2, 217	„ „ Inactive....	10, 369
„ Sulphophosphorous ....	2, 215	„ Tartralic....	10, 333
„ Sulphophosphovinic ....	8, 466	„ Tartramie ....	10, 344
„ Sulphopianic ....	14, 432	„ Tartramylic ....	11, 80
„ Sulphopropylic ....	9, 399	„ Tartrelic....	10, 333
„ Sulphopurpuric ....	13, 67	„ Tartromethylic ....	10, 338



Acid, Tartronic	....	....	10, 345	Acid, Turpetholic	....	....	17, 455
„ Tartrovinic	....	....	10, 340	„ Tyrosine-sulphuric	....	....	13, 362
„ Taurochenocholic	....	....	18, 131	„ Ulmic	....	....	15, 158
„ Taurocholic	....	....	18, 63	„ Ulmic (Boullay's)	....	....	17, 462
„ Taurylic	....	....	11, 154	„ Ulmic (Mulder's)	....	....	17, 472
„ Telluric	....	....	4, 400	„ Ulmic (Peligot's)	....	....	17, 466
„ „ Hydrochlorate of	....	....	4, 413	„ Uramilic	....	....	10, 190
„ Tellurous	....	....	4, 397	„ Ureo-carbonic	....	....	7, 377
„ Terbromocarbolic	....	....	11, 170	„ Uroerythric	....	....	18, 408
„ Terbromosalicylic	....	....	12, 291	„ Uric	....	....	10, 455
„ Terchloracetic	....	....	9, 209	„ Uroxanic	....	....	10, 478
„ Terchloracarbolic	....	....	11, 181	„ Usnic	....	....	17, 48
„ Terchlorofilicic	....	....	16, 129	„ Uvic	....	....	10, 346
„ obtained from bihydro-				„ Vaccinic	....	....	11, 421
chlorate of terchloro-				„ Valerianic	....	....	11, 21
naphthalin by the action				„ „ anhydrous	....	....	11, 37
of nitric acid	....	....	14, 67	„ Valeric	....	....	11, 21
„ Terchlorophthalic	....	....	13, 17	„ Valerotannic	....	....	15, 533
„ Terchloropteritannic	....	....	15, 502	„ Vanadic	....	....	4, 86
„ Terchlorosulphonaphthalic	....	....	14, 54	„ „ Behaviour of with			
„ Terchlorotannaspidic	....	....	15, 498	fluxes	....	....	4, 100
„ Terchlorovalerianic	....	....	11, 103	„ „ Phosphate of	....	....	4, 90
„ Terebentic	....	....	14, 255	„ Veratric	....	....	13, 351
„ Terebentilic	....	....	13, 118	„ Vinomellitic?	....	....	10, 13
„ Terebenzic	....	....	16, 183	„ Vulpic	....	....	17, 149
„ Terebic	....	....	12, 467	„ Xanthamylic	....	....	11, 60
„ Terebilic	....	....	12, 467	„ Xanthic	....	....	8, 448
„ Terechrysic	....	....	11, 424	„ Xanthomethylic	....	....	7, 293
„ Terephthalic	....	....	13, 13	„ Xanthopinic	....	....	14, 436
„ Ternitranisic	....	....	13, 143	„ Xanthoproteic	....	....	18, 264
„ Ternitrocarbolic	....	....	11, 211	„ Xanthotannic	....	....	15, 533
„ Ternitrocresylic	....	....	11, 228	„ Xylochloric	....	....	15, 534
„ Ternitrogentianic	....	....	16, 182	„ Zumic	....	....	11, 472
„ Tetrathionic	....	....	2, 164	Acid-albumin, Eichwald's	....	....	18, 343
„ Thiabetic	....	9, 355; 13, 446		„ Panum's	....	....	18, 261
„ „ anhydrous	....	....	9, 356	Acidifying Principle, <i>see</i> Oxygen.			
„ Thioformic	....	....	12, 479	Acids, action of Phosphorus Ter-			
„ Thiomelanic	....	....	8, 240	chloride on	....	....	10, 487
„ Thionaphthamic	....	....	14, 115	„ and bases, heat developed			
„ Thionuric	....	....	10, 183	in the combination of	....	....	1, 296
„ Thiotolamic	....	....	12, 343	„ development of electricity			
„ Thujetic	....	....	16, 244	by combination of, with			
„ Thymoëlic	....	....	15, 37	one another	....	....	1, 330
„ Titanic	....	....	3, 471	„ development of electricity			
„ „ Hydrate of	....	....	3, 475	by combination of, with			
„ Toluolsulphuric	....	....	12, 230	bases	....	....	1, 331
„ Toluyllic	....	....	13, 8	„ development of electricity			
„ Torfic	....	....	17, 474	by combination of, with			
„ Torfocrenic	....	....	17, 475	water	....	....	1, 320
„ Torfoxyrenic	....	....	17, 475	„ Amidated	....	....	7, 197
„ Trichloronaphthylodithionic,				„ Animal	....	....	7, 197
<i>see</i> Acid Terchlorosulpho-				„ combination of, with water	....	....	2, 63
naphthalic.				„ Copulated or Conjugated	....	....	7, 206
„ Trigenic	....	....	9, 311	„ Fatty	....	....	7, 229
„ Trithionic	....	....	2, 166	„ „ natural occurrence of	....	....	13, 387
„ Tungstic	....	....	4, 26	„ „ separation of	....	....	15, 210
„ Tungstic, behaviour of with				„ Organic	....	....	7, 196
fluxes	....	....	4, 42	„ „ action of ammonia			
„ Turpethic	....	....	17, 454	on	....	....	7, 141

- Acids, Organic, Anhydrides of .... 7, 193  
 „ „ basicity of .... 7, 197  
 „ „ bibasic .... 7, 203—205  
 „ „ compounds of Urea  
 with .... 13, 405  
 „ „ copulated .... 7, 221—226  
 „ „ destructive distil-  
 lation of .... 7, 81  
 „ „ hypothetically an-  
 hydrous .... 7, 13  
 „ „ mixture of, with  
 volatile oils and  
 camphor .... 7, 168  
 „ „ monobasic .... 7, 202, 204  
 „ „ reactions of with  
 metallic oxides .... 7, 209  
 „ „ salts of .... 7, 207  
 „ „ solubility of in  
 alcohol .... 8, 274  
 „ „ tribasic .... 7, 204—205  
 „ Polybasic, Glycerides of .... 13, 580  
 „ Polythionic .... 2, 168  
 „ Solid fatty, separation of... 15, 46  
 „ Vegetable .... 7, 196  
*Acidum aceti crystallisatum* .... 8, 282  
 „ *boracis* .... 2, 97  
 „ *borussicum* .... 7, 389  
 „ *muriaticum* .... 2, 319  
 „ „ *oxigenatum* .... 2, 289  
 „ *salis* .... 2, 319  
 „ *spirosum* .... 12, 235  
 „ *sulfuricum* .... 2, 175  
 „ *sulfurosum* .... 2, 168  
 „ *uvicum* .... 10, 346  
 „ *vitrioli phlogisticatum* .... 2, 168  
 „ *vitriolicum* .... 2, 175  
 Acolyctine .... 18, 178  
 Aconitanilic acid .... 11, 408  
 Aconitate of Ethyl .... 11, 408  
 Aconitates, metallic .... 11, 405—407  
 Aconitic acid .... 11, 402  
 Aconitine .... 18, 173  
 „ salts of .... 18, 176  
 Aconitobianil .... 11, 409  
*Aconitum Napellus*, preparation  
 of Aconitic acid from .... 11, 403  
 Acorin .... 18, 213  
 Acorns, sugar of .... 15, 215  
 „ volatile oil of .... 14, 357  
 Acrene series .... 9, 363  
 Acid principle of the Daphnads 17, 178  
 „ principles of Digitalis .... 14, 531  
 „ principle of White Mustard 14, 527  
 Acrol .... 9, 365  
 Acrolein .... 9, 365  
 „ action of water on .... 13, 551  
 Acrylates, metallic .... 9, 371  
 Acryl-compounds, *see* Allyl-com-  
 pounds .... 10, 543  
 Acrylic acid .... 9, 369  
 Acrylic Ether .... 9, 372  
 Acryl-resins .... 9, 368  
 Actynolite .... 3, 405  
 Adansonin .... 18, 213  
 Adhesion .... 1, 20—30  
 „ between elastic fluids 1, 20—26  
 „ between elastic fluids  
 and solids .... 1, 26  
 „ between liquids .... 1, 27  
 „ between liquids and  
 solids .... 1, 27—30  
 „ between solids .... 1, 30  
 „ phenomena, develop-  
 ment of heat accom-  
 panying .... 1, 300  
 Adhesive attraction .... 1, 20  
 Adipate of Ethyl .... 11, 424  
 Adipates, metallic .... 11, 423  
 Adipic acid .... 11, 422  
 Adipocere .... 16, 390  
 Adularia .... 3, 442  
 Aegyrine .... 5, 280  
 Aërated vegetable alkali .... 3, 14  
 Aeschynite .... 3, 478  
 Aescigenin .... 18, 37  
 Aesciglycol .... 18, 43  
 Aesciglycolal .... 18, 43  
 Aesciglycollic acid .... 18, 43  
 Aesciglyoxal .... 18, 43  
 Aesciglyoxalic acid .... 18, 43  
 Aescinic acid .... 18, 35  
 Aescioxalic acid .... 18, 44  
 Aescorkein .... 18, 45  
 Aescorcin .... 18, 45  
 Aesculetin .... 15, 23  
 „ compounds obtained  
 from .... 18, 44, 45  
 „ hydrated .... 16, 25  
 „ metallic compounds  
 of ... 16, 25  
 Aesculin .... 15, 341; 16, 19  
 „ hydrated .... 16, 22  
*Aesculus Hippocastanum*, oil of  
 the seeds of .... 17, 97  
*Aether* .... 7, 190  
 „ *sulfuricus* .... 8, 171  
*Aethiops martialis* .... 5, 193  
 „ *per se* .... 6, 3  
*Afer* .... 7, 190  
 Affinity .... 1, 31—159  
 „ alternating .... 1, 125  
 „ chemical results of .... 1, 38  
 „ columns of .... 1, 144  
 „ of composition .... 1, 35  
 „ elective double... 1, 119, 140  
 „ „ simple.... 1, 33, 117  
 „ fundamental notion of... 1, 33  
 „ history of .... 1, 33



Affinity, influence of, on combination .... 1, 35—111	Air, Atmospheric, properties of 2, 402
„ influence of, on decomposition .... 1, 111—136	„ Atmospheric, weight of a litre of .... 1, 281
„ influence on, of condensation .... 1, 37	„ crystallisation influenced by access of .... 1, 9
„ influence on, of contact 1, 36	„ dephlogisticated .... 2, 20
„ influence on, of electricity 1, 37	„ destruction of organic germs in, by passing it through a red-hot tube .... 7, 109
„ influence on, of expansion .... 1, 37	„ effect of exclusion of, in arresting fermentation .... 7, 99
„ influence on, of light .... 1, 37	„ heavy inflammable .... 7, 249
„ influence on, of liquidity and gaseity .... 1, 36	„ „ combustible .... 7, 249
„ influence on, of temperature .... 1, 36	„ hepatic .... 2, 195
„ Kant's theory of phenomena of .... 1, 159	„ inflammable .... 2, 42
„ latent .... 1, 124	„ magnetic relations of .... 1, 516
„ mediating .... 1, 35	„ and Mercury, comparison of the expansion of by heat .... 1, 225
„ origin and nature of phenomena of .... 1, 145—159	„ nitrous .... 2, 377
„ predisposing, decompositions by .... 1, 124	„ rarefied, electric conducting power of .... 1, 312
„ range of .... 1, 34	„ vital .... 2, 29
„ reciprocal .... 1, 125—133	Air-gun light .... 1, 206
„ „ apparent cases of .... 1, 132	„ -pistol .... 2, 59
„ reciprocal, illustrations of 1, 129	„ -pump light .... 1, 205
„ „ influences affecting .... 1, 125	„ -pyrometer .... 1, 226
„ separating .... 1, 124	„ -thermometer .... 1, 226
„ strength of .... 1, 136—145	Ajwakaphul, <i>see</i> Thymol.
„ synonymes of .... 1, 33	Akcethine .... 9, 12
„ tables of .... 1, 138, 140	Alabaster .... 3, 201
„ theories of 1, 31; and 145—159	Alanine.... 9, 434
„ of individual substances, theory of .... 1, 160	Alantin.... 16, 112
„ works and memoirs relating to .... 1, 31	Alban .... 17, 342
Agalmatolite .... 3, 419, 452	Albertus Magnus .... 1, 4
Agaricin .... 18, 122, 213	Albite.... 3, 412
Aggregation, attraction of .... 1, 6	Albukasis .... 1, 3
Age or Axin .... 17, 47	Albumin, coagulated solution of in aqueous ammonia.... 18, 293
Aginin .... 17, 47	Albumin, coagulation of 18, 277, 281
Agitation, crystallisation effected by .... 1, 9	„ composition of .... 18, 284
Aggregation, state of, in organic compounds .... 7, 45	„ decomposition of, by dry distillation .... 18, 287
Aggregation of compounds, state of .... 1, 86	„ of Eggs, <i>see</i> Egg-albumin.
Agricola, George .... 1, 4	„ non-coagulation of, by rennet .... 18, 302
<i>Agrostemma Githago</i> , preparation of Saponin from the seeds of .... 16, 86	„ of Plants, <i>see</i> Plant-albumin.
Air, alkaline .... 2, 416	„ supposed occurrence of, in milk .... 18, 275, 307
„ Atmospheric, memoirs relating to .... 2, 370	„ oxidation of, by permanganate of potash 18, 288
„ Atmospheric, composition of 2, 403—415	„ precipitation of, by carbonic, phosphoric, and boracic acids .... 18, 289
	„ precipitation of, by tannic acid .... 15, 473
	„ preparation of 18, 275, 282

- Albumin, preparation of, leucine  
 from .... 11, 428  
 „ properties of 18, 276, 283  
 „ purification of, by dia-  
 lysis .... 18, 282  
 „ putrefaction of .... 18, 287  
 „ reaction of, with acetic  
 acid .... 18, 279, 292  
 „ reaction of, with alco-  
 hol .... 18, 301  
 „ reactions of, with alka-  
 lis .... 18, 279, 294  
 „ reactions of, with alu-  
 mina salts .... 18, 296  
 „ reaction of, with arse-  
 nious acid .... 18, 296  
 „ reaction of, with  
 baryta water .... 18, 296  
 „ reactions of, with bis-  
 muth salts .... 18, 297  
 „ reaction of, with bro-  
 mine .... 18, 288  
 „ reaction of, with car-  
 bolic acid .... 18, 301  
 „ reactions of, with cop-  
 per oxides and salts 18, 297  
 „ reaction of, with cre-  
 sylic alcohol .... 18, 302  
 „ reaction of, with dex-  
 trin.... .... 18, 302  
 „ reaction of, with  
 ether .... 18, 301  
 „ reaction of, with ferro-  
 cyanide of potassium 18, 300  
 „ reaction of, with chlo-  
 ride of gold .... 18, 300  
 „ reaction of, with gum-  
 arabic .... 18, 302  
 „ reaction of, with hy-  
 drochloric acid 18, 278, 290  
 „ reaction of, with  
 iodic acid .... 18, 290  
 „ reactions of, with iron  
 salts .... 18, 297  
 „ reactions of, with  
 lead oxide and salts 18, 297  
 „ reaction of, with lactic  
 acid .... 18, 272  
 „ reaction of, with lime 18, 296  
 „ reactions of, with mer-  
 cury salts .... 18, 298  
 „ reaction of, with nitric  
 acid .... 18, 292  
 „ reaction of, with ozon-  
 ised air .... 18, 287  
 „ reactions of, with pla-  
 tinum salts.... .... 18, 300  
 „ reaction of, with  
 potash .... 18, 294
- Albumin, reaction of, with silver  
 nitrate .... 18, 300  
 „ reaction of, with  
 strontia-water .... 18, 296  
 „ reaction of, with sul-  
 phate of lime .... 18, 296  
 „ reaction of, with sul-  
 phuric acid 18, 298, 289  
 „ reaction of, with  
 tannic acid .... 18, 302  
 „ reaction of, with tin  
 salts .... 18, 297  
 „ reactions of, with  
 zinc salts .... 18, 297  
 „ saline solutions of, pre-  
 cipitation of, by phos-  
 phoric, acetic, lactic,  
 oxalic, and tartaric  
 acids .... 18, 293  
 „ of serum .... 18, 274  
 „ soluble, not obtained  
 free from ash .... 18, 283  
 „ vegetable .... 18, 426  
 Albuminates, metallic .... 18, 303, 306  
 Albuminic acid .... 18, 302  
 Albumino-saline solutions, reac-  
 tions of .... 18, 261  
 Albuminose .... 18, 268, 323  
 Albumin-peptone .... 18, 337  
 „ -sulphuric acid, insolu-  
 ble .... 18, 290  
 „ -sulphuric acid, solu-  
 ble .... 18, 289  
 Albuminous substances, *see* Pro-  
 teides.  
 „ substances, fermen-  
 tation and putre-  
 faction of .... 7, 97  
 Alchemists, most renowned .... 1, 3, 6  
 Alchemy, foundation of .... 1, 3  
 Alcohol, absolute, preparation of  
 7, 197; 13, 415  
 „ action of bromide and  
 iodide of ethyl on .... 13, 418  
 „ action of metallic chlo-  
 rides, bromides, and  
 iodides on .... 13, 418  
 „ action of hydriodic  
 acid on .... 13, 417  
 „ action of hydrobromic  
 acid on .... 13, 417  
 „ action of hydrochloric  
 acid on 7, 35, 146; 13, 417  
 „ action of sulphuric acid  
 and sulphates on  
 10, 515; 13, 419  
 „ adulteration of volatile  
 oils with .... 7, 161  
 „ compounds of .... 8, 257



Alcohol of crystallisation, compounds containing ....	8, 257	Alcohol, decomposition of, by chlorochromic acid ....	8, 247
„ compounds of, with carbon, boron, phosphorus, and sulphur ....	8, 263	„ decomposition of, by chlorosulphuric acid....	8, 246
„ compounds of, with nitrogen. ....	8, 265	„ decomposition of, by chromic acid....	8, 243
„ compounds of, with organic bodies ....	8, 272	„ decomposition of, by combustion ....	8, 206
„ compounds of, with oxygen and hydrogen	8, 258	„ decomposition of, by corrosive sublimate ....	8, 247
„ compounds of, with selenium, iodine, and chlorine ....	8, 264	„ decomposition of, by corrosive sublimate and lime ....	8, 245
„ constitution of ....	8, 200	„ decomposition of, by the electric spark ....	13, 415
„ conversion of, into chloral ....	7, 34	„ decomposition of, by electricity ....	8, 202
„ conversion of, into water and ether ....	7, 35	„ decomposition of, by fluoride of arsenic ....	8, 246
„ copulated acids produced by ....	7, 224	„ decomposition of, by fluoboric acid ....	8, 245
„ decomposition of, by alkalis ....	8, 253	„ decomposition of, by fluosilicic acid ....	8, 246
„ decomposition of, by aqua regia ....	13, 416	„ decomposition of, by hydrobromic and hydriodic acids....	8, 253
„ decomposition of, by arsenic acid ....	8, 243	„ decomposition of, by hydrochloric acid ....	8, 246
„ decomposition of, by bichloride of platinum	8, 248	„ decomposition of, by hydrofluoric acid ....	8, 245
„ decomposition of, by bichloride of platinum and excess of potash	8, 245	„ decomposition of, by hypochlorous acid ....	8, 220
„ decomposition of, by bichloride of tin ....	8, 250	„ decomposition of, by iodine ....	8, 215
„ decomposition of, by boracic acid ....	8, 243	„ decomposition of, by mercuric salts ....	8, 255
„ decomposition of, by bromic acid ....	8, 221	„ decomposition of, by nitric acid ....	8, 217
„ decomposition of, by bromine ....	8, 214	„ decomposition of, by nitric oxide ....	8, 217
„ decomposition of, by chloric acid ....	8, 220	„ decomposition of, by osmic acid ....	8, 245
„ decomposition of, by chloride of aluminum	8, 247	„ decomposition of, by oxide of manganese and sulphuric acid ....	8, 244
„ decomposition of, by chloride of arsenic ....	8, 247	„ decomposition of, by pentachloride of antimony ....	8, 247
„ decomposition of, by chloride of boron ....	8, 246	„ decomposition of, by phosphoric acid ....	8, 242
„ decomposition of, by chloride of cyanogen	8, 256	„ decomposition of, by phosphorus ....	8, 216
„ decomposition of, by chloride of lime ....	8, 214	„ decomposition of, by potassium and sodium	8, 254
„ decomposition of, by chloride of silicium ....	8, 247	„ decomposition of, by protochloride of iron	8, 250
„ decomposition of, by chloride of zinc ....	8, 252	„ decomposition of, by protochloride of platinum ....	8, 247
„ decomposition of, by chlorine ....	8, 211		

- |                                                                                                    |                                                                                                              |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Alcohol, decomposition of, by<br>protochloride of sul-<br>phur .... 8, 246                         | Alcohol, slow combustion of, in<br>contact with heavy<br>metallic oxides, earths,<br>and charcoal.... 8, 210 |
| „ decomposition of, by<br>protochloride of tin .... 8, 252                                         | „ slow combustion of, in<br>contact with metallic<br>wires and laminæ .... 8, 209                            |
| „ decomposition of, by<br>a red heat .... 8, 201                                                   | „ slow combustion of, in<br>contact with platinum-<br>black .... 8, 208                                      |
| „ decomposition of, by<br>selenious acid .... 8, 221                                               | „ slow combustion of, in<br>contact with spongy<br>platinum .... 8, 209                                      |
| „ decomposition of, by<br>sesquichloride of iron 8, 249                                            | „ separation of, from<br>water by distillation 8, 262                                                        |
| „ decomposition of, by hy-<br>drated sulphuric acid 8, 222                                         | „ separation of, from water,<br>by passage of through<br>membranes .... 8, 260                               |
| „ decomposition of, by an-<br>hydrous sulphuric acid 8, 221                                        | „ separation of, from<br>water by exposure to<br>cold .... 8, 260                                            |
| „ decomposition of, by<br>terchloride of phos-<br>phorus .... 8, 246                               | „ solutions of metallic<br>compounds in .... 8, 265                                                          |
| „ decomposition of, by ter-<br>chloride of vanadium 8, 247                                         | „ solution of turpentine<br>oil in.... 14, 271                                                               |
| „ decomposition of, by<br>terfluoride of chromium 8, 246                                           | „ solution of volatile oils in 7, 168                                                                        |
| „ decomposition of, by<br>uranic sulphate .... 8, 245                                              | „ supposed relative posi-<br>tions of atoms in .... 7, 33                                                    |
| „ decomposition of, by<br>vanadic acid.... 8, 245                                                  | „ tables showing the rela-<br>tion between strength<br>and boiling-point of.... 8, 261                       |
| „ defuselisation of .... 13, 415                                                                   | „ tables showing the rela-<br>tion between strength<br>and density of .... 8, 259                            |
| „ flame fed with oxygen 2, 29                                                                      | „ vapour, tension of, at<br>different temperatures 1, 262                                                    |
| „ formation of .... 8, 195                                                                         | „ and water, mixtures of 8, 258                                                                              |
| „ „ from ole-<br>fiant gas .... 10, 511                                                            | „ Allylic .... 10, 544; 13, 540                                                                              |
| „ formation of acetic<br>acid by combustion of,<br>in contact with plati-<br>num black .... 8, 285 | „ Amylic, sources .... 11, 9                                                                                 |
| „ formation of ether and<br>water from .... 8, 225                                                 | „ Benzoic ... 12, 18                                                                                         |
| „ formation of oxalic<br>acid from .... 13, 514                                                    | „ Benzyllic .... 12, 18                                                                                      |
| „ formation of sulpho-<br>vinic acid from .... 8, 222                                              | „ Butylic .... 10, 71                                                                                        |
| „ hydrated, preparation of 8, 195                                                                  | „ Campholic .... 14, 332                                                                                     |
| „ hydrated, preparation<br>of, from mangold-<br>wurzel .... 13, 414                                | „ Caproic .... 11, 413                                                                                       |
| „ literature and history.... 8, 194                                                                | „ Caprylic .... 13, 183, 587                                                                                 |
| „ mixtures of, with ether 8, 273                                                                   | „ Cerotylic .... 18, 133                                                                                     |
| „ „ with wood-<br>spirit.... 8, 273                                                                | „ Cetylic .... 16, 344                                                                                       |
| „ preparation of chloral<br>from.... 9, 201                                                        | „ Cinnamic .... 13, 256, 286                                                                                 |
| „ preparation of ethylene<br>from.... 8, 163                                                       | „ Cresylic .... 12, 229                                                                                      |
| „ properties of .... 8, 199                                                                        | „ Cuminic .... 14, 143                                                                                       |
| „ resolution of, into water<br>and olefiant gas .... 7, 34                                         | „ Cymylic .... 14, 143                                                                                       |
| „ slow combustion of, in<br>contact with iridium-<br>black .... 8, 209                             | „ Hexylic .... 11, 413                                                                                       |
|                                                                                                    | „ Melissic .... 18, 150                                                                                      |
|                                                                                                    | „ Mesitic .... 9, 1                                                                                          |
|                                                                                                    | „ Methylic .... 7, 258                                                                                       |
|                                                                                                    | „ Methylic, synthesis of.... 12, 477                                                                         |
|                                                                                                    | „ Octylic.... 13, 183, 587                                                                                   |
|                                                                                                    | „ Propylic .... 9, 398                                                                                       |
|                                                                                                    | „ Sycocerylic .... 17, 43                                                                                    |



Alcohol, Tritylic ....	9, 398	Aldehyde, Chlorcerotic....	18, 140
Alcoholate of Baryta ....	13, 422	„ Cinnamic ....	13, 258
„ Calcium-chloride ....	8, 267	„ Cuminc ....	14, 144
„ Lime-nitrate ....	8, 267	„ Euodic ....	14, 529
„ Magnesia-nitrate ....	8, 268	„ Lauric ....	15, 43
„ Magnesium-chloride ....	8, 268	„ Mesitic ....	9, 26
Alcoholates ....	8, 257	„ CEnanthylic ....	12, 446
Alcoholic fermentation ....	15, 265	„ Palmitic ....	16, 349
Alcoholic Potash, action of, on		„ Propionic ....	9, 400
chlorine-compounds ..	13, 421	Aldehyde-ammonia ....	8, 280
„ solutions ....	8, 257	„ -ammonia, bisulphite of	9, 287
Alcoholometer, Gay-Lussac's ....	1, 11	„ resin ....	17, 456
Alcoholometers ....	8, 260	Aldehydes ....	7, 25
Alcohol-radicals ....	7, 170	„ action of ammonia	
„ from Boghead		on....	7, 140, 142
cannel coal ....	13, 386	„ composition and clas-	
„ compounds of,		sification of ....	7, 192
with earth-metals	13, 492	„ properties of ....	7, 193
Alcohols, action of phosphorus		Aldehydic Acid ....	8, 181
terchloride on ....	10, 487	Aldides, <i>see</i> Aldehydes.	
„ constitution and pro-		<i>Alectorolophus hirsutus</i> , bitter of	18, 239
perties of ....	7, 191	Alambics ....	1, 288
„ expansion of, by heat		Aleurone ....	18, 385
1, 226—231		Alizarin ....	14, 129
„ formation of, in vinous		„ compounds of, with	
fermentation ....	15, 265, 276	metallic oxides ....	14, 139
Alcornine ....	18, 214	„ compound of, with ve-	
<i>Alcyonum exos</i> , phosphorescence		rantin ....	16, 60
of ....	1, 186	„ formation of, from	
Aldehyde ....	8, 274; 9, 518; 13, 437	rubian ....	16, 36
„ action of chlorine on	12, 535	„ hydrate ....	14, 138
„ action of sulphurous		„ preparation of, from	
acid gas on ....	13, 441	madder ....	14, 133; 16, 33
„ combinations of ....	8, 277	„ preparation of, from	
„ compound of, with		rubian ....	14, 133
acetic anhydride ....	13, 440	Alizarites, metallic ....	14, 139
„ compound of, with		Alkali, aërated vegetable ....	3, 18
chloride of acetyl ....	13, 441	„ definition of ....	3, 3
„ decompositions of	8, 277; 13, 439, 440	„ mild mineral ....	3, 78
„ expansion of, by heat	1, 231	„ mineral ....	3, 74
„ formation and prepara-		„ produced by oxidation of	
tion of ....	8, 275	creatine ....	9, 378
„ formation of, from		vegetable ....	3, 10
acetal ....	13, 437	<i>Alkali vegetale fixum</i> ....	3, 14
„ formation of, from		Alkali, volatile ....	2, 416
sulphovinic acid ....	13, 438	Alkali-metals ....	3, 2
„ liquid isomeride of ....	8, 281	„ „ action of, on or-	
„ preparation of ....	13, 439	ganic compounds	7, 145
„ properties of ....	8, 277	Alkaline Air ....	2, 416
„ solid and fusible iso-		„ Bihydrosulphates ....	2, 226
merides of ....	8, 281	„ Bisulphites, compounds	
„ solid and infusible		of, with acetone ....	10, 522
isomeride of ....	8, 281	„ Bisulphites, compounds	
„ supposed relative po-		of, with bitteralmond oil	12, 27
sition of atoms in ....	7, 32	„ Bisulphites, compounds	
„ Capric ....	14, 489	of, with cinnamic alde-	
„ Caprylic ....	13, 187	hyde....	13, 263
„ Cetylic ....	16, 349	„ Bisulphites, compounds	
		of, with cuminol ....	14, 147

Alkaline Earths ....	3, 133	Alkarsin with Mercuric Chloride	9, 324
„ Hydrates, action of, on compound Ethers ....	13, 388	„ with Nitrate of Silver	9, 325
„ Hydrosulphates ....	2, 225	Alkaptone ....	18, 412
Alkalis ....	2, 39	<i>Alkohol Aceti</i> ....	8, 282
„ electrolysis of ....	1, 458	<i>Alkohol Vini</i> ....	8, 194
„ fixed, action of, on organic compounds ....	7, 133	Alkophyr ....	18, 337
„ fixed, peculiar behaviour of organic compounds containing nitrogen or chlorine towards ....	7, 158	Allanite ....	3, 427
„ organic, <i>see</i> Alkaloïds.		Allantoic Acid ....	10, 260
„ less soluble or earthy ....	3, 133	Allantoin ....	10, 259
„ reactions of, with cyanogen ....	7, 387	„ metallic compounds of	10, 262
„ vegetable, <i>see</i> Alkaloïds.		Allanturic Acid ? ....	9, 447
Alkaloïd, bitter, of Carapa-bark	17, 314	Allituric Acid ? ....	9, 443
„ bitter, of Copalche-bark	17, 314	Allophanate of Amyl ? ....	11, 74
„ from <i>Pteris aquilina</i>	10, 410	„ Ethyl ....	9, 267
„ Stenhouse's, from kidney beans ....	10, 408	Allophanates, metallic ....	9, 267
„ from the seeds of <i>Vitex Agnus Castus</i>	18, 212	Allophane ....	3, 413
Alkaloïds, artificial preparation of ....	7, 178	„ Opaline ....	3, 411
„ combinations of ....	7, 181	Allophanic Ether ....	9, 267
„ decompositions of ....	7, 181	Alloxan....	10, 171
„ electrolysis of aqueous solution of ....	7, 182	„ decomposition of	10, 171
„ history of ....	7, 176	„ hydrates of	10, 177
„ literature of ....	7, 175	„ preparation of, from uric acid ....	10, 171
„ natural, preparation of ....	7, 177	Alloxan, preparation of Murexide from ....	10, 194
„ non-existence of ready-formed ammonia in	7, 188	„ properties of ....	10, 171
„ odour of ....	7, 180	Alloxanates, metallic ....	10, 161—169
„ precipitation of, by inorganic bases, salts, &c. ....	7, 183	Alloxanic acid ....	10, 160, 565
„ precipitation of, by organic acids and salts ....	7, 183	Alloxantin ....	10, 186
„ precipitation of, by tannic acid	7, 177; 15, 473	„ compound of, with urea ....	13, 405
„ properties of ....	7, 180	„ hydrated ....	10, 190
„ salts of ....	7, 182	„ preparation of Murexide from ....	10, 194
„ solubility of, in alcohol	8, 274	Alloys, expansion of certain, in solidifying ....	1, 256
„ non-oxygenated, composition of ....	7, 186	„ two solidifying points of	1, 256
„ oxygenated, composition of ....	7, 187	„ of Aluminium....	3, 239
„ of Escholtzia ....	17, 162	„ Antimony ....	4, 392
„ Sanguinaria ....	17, 162	Alloy of Antimony, Bismuth, and Tin ....	5, 104
Alkanet-red ....	17, 17	Alloys of Arsenic ....	4, 316
Alkargen ....	9, 327	„ Barium ....	3, 166
Alkarsin ....	9, 320	„ Bismuth ....	4, 450
„ with Mercuric Bromide ....	9, 323	Alloy of Bismuth and Copper....	5, 477
		Alloys of Bismuth, Lead, and Tin ....	5, 180
		Alloy of Bismuth and Silver ....	6, 193
		Alloys of Cadmium ....	5, 66
		„ Calcium ....	3, 220
		Alloy of Cobalt and Iron ....	5, 354
		„ Cobalt and Tin ....	5, 354
		„ Copper and Barium ?	5, 462
		„ Copper and Cadmium	5, 481
		„ Copper and Iron ....	5, 489
		„ Copper, Iron, and Zinc	5, 496
		„ Copper and Lead ....	5, 484
		„ Copper, Lead, Tin, and Zinc ....	5, 488



Alloy of Copper and Manganese	5, 468	Alloy of Platinum and Barium	6, 327
„ Copper and Molybdenum	5, 467	„ Platinum and Bismuth	6, 333
„ Copper, Nickel, and Zinc	5, 497	„ Platinum and Cadmium	6, 335
„ Copper and Potassium	5, 456	„ Platinum and Copper	6, 337
Alloys of Copper and Tin	5, 481	„ Platinum, Copper, and Zinc	6, 338
Alloy of Copper and Tungsten	5, 466	„ Platinum and Gold	6, 339
Alloys of Copper and Zinc	5, 477	„ Platinum and Iron	6, 336
„ Glucinum	3, 302	„ Platinum and Lead	6, 335
Alloy of Gold and Bismuth	6, 238	„ Platinum and Molybdenum	6, 331
„ Gold and Cobalt	6, 246	„ Platinum and Nickel	6, 337
„ Gold and Copper	6, 246	„ Platinum and Palladium	6, 358
„ Gold, Copper, and Zinc	6, 246	„ Platinum and Potassium	6, 320
„ Gold and Iron	6, 245	„ Platinum and Silver	6, 339
„ Gold and Lead	6, 245	„ Platinum and Sodium	6, 323
„ Gold and Manganese	6, 237	„ Platinum and Tungsten	6, 331
„ Gold and Molybdenum	6, 237	„ Platinum and Tin	6, 335
„ Gold and Nickel	6, 246	„ Platinum and Vanadium	6, 331
„ Gold and Potassium	6, 226	„ Platinum and Zinc	6, 333
„ Gold and Silver	6, 247	Alloys of Potassium	3, 72
„ Gold, Silver, and Copper	6, 251	„ Rhodium	6, 368
„ Gold, Silver, and Palladium	6, 358	„ Rhodium and Lead	6, 368
„ Gold and Tin	6, 239	„ Silicium	3, 465
„ Gold and Tungsten	6, 237	Alloy of Silver and Barium	6, 181
„ Gold and Zinc	6, 239	„ Silver and Copper	6, 197
„ Iridium and Copper	6, 392	„ Silver and Iron	6, 195
„ Iridium and Gold	6, 393	„ Silver and Lead	6, 194
„ Iridium and Lead	6, 392	„ Silver and Molybdenum	6, 183
„ Iridium and Silver	6, 392	„ Silver and Nickel	6, 196
Alloys of Iridium and Platinum	6, 393	„ Silver, Antimony, and Potassium	6, 192
Alloy of Iridium and Tin	6, 391	„ Silver and Potassium	6, 177
„ Iron and Aluminum	5, 275	„ Silver and Tin	6, 194
„ Iron and Barium	5, 273	„ Silver and Tungsten	6, 182
„ Iron and Glucinum	5, 274	„ Silver and Zinc	6, 194
„ Iron and Lead	5, 315	„ Sodium and Zinc	5, 44
„ Iron and Magnesium	5, 274	Alloys of Tantalum	4, 14
„ Iron and Potassium	5, 264	„ Tellurium	4, 426
„ Iron and Tin	5, 314	„ Tin and Bismuth	5, 104
„ Iron and Zinc	5, 312	Alloy of Tin and Potassium	5, 95
„ Lead and Bismuth	5, 178	„ Tin and Sodium	5, 98
„ Lead and Potassium	5, 160	Alloys of Tin and Zinc	5, 105
„ Lead and Sodium	5, 162	„ Titanium	3, 488
Alloys of Lead and Tin	5, 179	„ Tungsten	4, 47
„ Lead, Tin, and Zinc	5, 181	„ Uranium	4, 194
Alloy of Lead and Zinc	5, 179	„ Vanadium	4, 104
Alloys of Lithium	3, 132	„ Zinc	5, 51
„ Magnesium	3, 254	Alloy of Zinc and Bismuth	5, 51
„ Manganese	4, 248	„ Zinc and Cobalt	5, 353
„ Molybdenum	4, 80	„ Zinc and Potassium	5, 42
Alloy of Nickel and Bismuth	5, 393	Allyl	13, 538
„ Nickel and Cobalt	5, 397	„ Acetate	10, 543; 13, 544
„ Nickel and Copper	5, 497	„ Alcohol	10, 544; 13, 540
Alloys of Nickel and Iron	5, 394	„ Benzoate	12, 841; 13, 545
Alloy of Nickel and Lead	5, 394		
„ Nickel and Tin	5, 394		
„ Nickel and Zinc	5, 394		
Alloys of Palladium	6, 355—357		

Allyl Bibromide	....	13, 542	Alumina-salts ( <i>continued</i> ): Ali-		
„ Biniodide	....	13, 541	zarite	....	14, 140
„ Butyrate	....	13, 545	„ Amylosulphate	....	11, 58
„ Carbonate	....	13, 543	„ Apocrenate	....	17, 470
„ Cyanate	....	13, 544	„ Arseniate	....	4, 310
„ Iodide	....	13, 541	„ Azelaate	....	17, 81
„ Oxide	.... 9, 363; 13, 539		„ Benzoate	....	12, 40
„ Oxalate	....	13, 545	„ Borates	....	3, 309
„ Oxamate	....	13, 546	„ Bromate	....	3, 315
„ Persulphide (?)	....	9, 377	„ Camphorate	....	14, 461
„ Sulphide	.... 13, 372; 13, 540		„ Carbonate	....	3, 308
„ Sulphocyanide	....	13, 544	„ Chlorate	....	3, 316
„ Terbromide	....	13, 542	„ Cinnamate	....	13, 275
„ Valerate	....	13, 545	„ Citrate	....	11, 452
„ and Silver, Nitrate of	....	9, 364	„ Metaphosphate	....	3, 311
Allylamine	....	13, 547	„ Mucate	....	11, 507
Allyl-mercaptan	....	13, 541	„ Nitrates	....	3, 318
Allyl-naphthyl-sulphocarbamide	14, 122		„ Oxalates	....	9, 135
Allyl-sulphuric Acid	....	13, 543	„ Perchlorate	....	3, 317
Allyl-urea	....	13, 546	„ Phosphates	....	3, 309
Allyl-xanthic Acid	....	13, 544	„ Phosphite	....	3, 309
Almond Legumin	....	18, 433	„ Pyrogallate	....	11, 401
Almond Oil	....	17, 92	„ Pyrophosphate	....	3, 311
Aloeretic Acid	....	12, 9	„ Pyrotartrate	....	11, 92
Aloes	....	17, 618	„ Rhodizonate	....	10, 402
„ artificial bitter of	....	12, 1	„ Selenites	....	3, 314
„ preparation of picric acid			„ Silicates	....	3, 411
from	....	11, 213	„ Silicate of, with fluoride		
Aloetamide	....	12, 12	of silicium, or fluoride		
Aloetic Acid	....	12, 1—10	of aluminum	....	3, 419
Aloïn	....	16, 461	„ Suberate	....	13, 210
Aloisic Acid ?	....	13, 216	„ Succinate	....	10, 122
Aloïsol	....	13, 214	„ Sulphates	....	3, 312
Alouchi resin	....	17, 396	„ Sulphindigotate	....	13, 64
Alphajalapic Acid	....	16, 411	„ Sulphites	....	3, 311
Alphanese	....	5, 471	„ Tannate	....	15, 466
Alpha-orcein	....	12, 368	„ Tantalate	....	4, 14
Alpha-phloretin	....	16, 10	„ Tartrate	....	10, 291
Alpha-quercetin	....	16, 494	„ Tellurate	....	4, 425
Alpha-quinidine	....	17, 295	„ Tellurite	....	4, 425
Alphatoluic Acid	....	17, 151	„ Tungstate	....	4, 45
Alphene, sulphide	....	9, 394	„ Valerate	....	11, 33
Alstonia bitter	....	18, 214	„ Vanadate	....	4, 103
Althæa, soft resin of	....	17, 446	„ Zirconate	....	3, 349
Althæin	....	10, 240	„ and Ammonia, car-		
Alternating affinity	....	1, 125	bonate of	....	3, 318
Althionates	....	8, 432	„ and Ammonia, sulphate		
Aludels	....	6, 2	of	....	3, 318
Alum, Ammonia	....	3, 318	„ and Ammonia, tartrate		
„ Basic Potash	....	3, 323	of	....	10, 292
„ Cubic	....	3, 323	„ and Baryta, oxalate		
„ Potash	....	3, 303, 321	of	....	9, 135
„ Soda	....	3, 325	„ and Ethylamine, Sul-		
„ Spirit of	....	3, 322	phate	....	13, 481
„ use of, for steeping wood	7, 113		„ and Ferric Oxide, sul-		
Alumina	....	3, 304	phite of	....	5, 277
„ behaviour of, with fluxes	3, 325		„ and Ferrous Oxide,		
Alumina-salts	....	3, 307	sulphate of	....	5, 276
„ Acetate	.... 8, 303; 13, 443		„ and Lithia, phosphate of	3, 326	



Alumina and Lithia, sulphate of	3, 326	Aluminium, Chloride of with phosphuretted hydrogen	3, 317
„ and Magnesia, phosphate of	3, 328	„ Chloride, hydrosulphate of	3, 317
„ and Magnesia, sulphate of	3, 329	„ Ferrocyanide	7, 486; 13, 408
„ and Manganous Oxide, silicate of	4, 245	„ Fluoride of, with alumina	3, 317
„ and Manganous Oxide, sulphate of	4, 242	„ Fluoride of, with hydrofluoric acid of ammonia	3, 320
„ and Methylamine, sulphate	13, 481	„ Hydrated Chloride of, with alumina	3, 316
„ and Platinic Oxide, sulphate of	6, 330	„ Hydrated Fluoboride	3, 318
„ and Potash, carbonate of	3, 321	„ Hydrated Fluoride	3, 317
„ and Potash, oxalate of	9, 135	„ Oxide	3, 304
„ and Potash, sulphate of	3, 321	„ Phosphide	3, 309
„ and Potash, tartrate of	10, 292	„ Platino-platinidecyanide	8, 55
„ and Soda, oxalate of	9, 135	„ Selenide	3, 314
„ and Soda, pyrophosphate of	3, 325	„ Sulphide	3, 311
„ and Soda, sulphate of	3, 325	„ Sulphocyanide	8, 85
„ and Strontia, oxalate of	9, 135	„ Telluride	4, 425
„ and Zinc-oxide, sulphate of	5, 46	„ and Copper, fluoride of	5, 464
„ with Fluoride of Aluminium	3, 317	„ and Iron, alloy of	5, 275
„ with Hydrated Chloride of Aluminium	3, 316	„ „ carbide of	5, 276
Aluminate of Ammonia	3, 318	„ and Lithium, fluoride of	3, 327
„ Baryta	3, 327	„ and Molybdenum	4, 78
„ Cobalt-oxide	5, 345	„ and Nickel, fluoride of	5, 316
„ Cupric oxide	5, 464	„ and Potassium, chloride of	3, 323
„ Ferrous oxide	5, 275	„ and Potassium, fluoride of	3, 324
„ Glucina	3, 329	„ and Sodium, chloride of	3, 326
„ blue Iridium Oxide?	6, 291	„ and Sodium, fluoride of	3, 326
„ Lead-oxide, hydrous	5, 165	„ and Zinc, fluoride of	5, 46
„ Lime	3, 327	Alum-stone	3, 323
„ Magnesia	3, 328	Aluminous Augite	3, 403
„ Magnesia, with Silicate of Magnesia	3, 462	Alyxia-camphor	14, 357
„ Nickel-oxide	5, 386	Amalic acid	11, 433
„ Potash	3, 320	Amalic acid, decomposition-product of	14, 505
„ Soda	3, 325	Amalgam of Aluminium	6, 110
„ Strontia	3, 327	„ ammoniacal	6, 67
„ Zinc-oxide	5, 46	„ of Antimony	6, 120
Aluminite	3, 312	„ Antimony and Lead	6, 127
Aluminium	3, 303	„ Arsenic	6, 116
„ -alloys	3, 329	„ Barium	6, 105
Aluminum-amalgam	6, 110	„ Bismuth	6, 122
Aluminum, Arsenide	4, 310	„ Bismuth and Lead	6, 127
„ Bromide	3, 314	„ Bismuth, Tin, and Lead	6, 128
„ Chloride	3, 315	„ Cadmium	6, 124
„ Chloride of, with ammonia	4, 20	„ Calcium	6, 107
		„ Iridium	6, 392

Amalgam of Cobalt ....	6, 129	Amide of Potassium ....	3, 67
„ Copper ....	6, 131	„ Sodium ....	3, 116
„ Gold ....	6, 247	Amides ....	7, 24
„ Gold and Silver ....	6, 251	„ Cyanic ....	9, 253
„ Iron ....	6, 128	Amidobenzoate of Ethyl ....	12, 148
„ Lead ....	6, 126	„ Methyl ....	12, 146
„ Lithium ....	6, 105	Amidobenzoates, metallic ....	12, 145
„ Magnesium ....	6, 108	Amidobenzoic acid ....	12, 142
„ Manganese ....	6, 115	Amido-bromide of Mercury ....	6, 83
„ native ....	6, 199	Amido-chlorides of Mercury ....	6, 84
„ of Nickel ....	6, 130	Amidocuminate of Ethyl ....	14, 176
„ Osmium ....	6, 422	Amidocuminic acid ....	14, 174
„ Palladium ....	6, 357	Amidogen ....	2, 416
„ Platinum ....	6, 338	„ -acids ....	7, 197
„ Potassium ....	6, 97	„ Bromide ....	2, 469
„ Potassium and So-		„ Chloride ....	2, 470
dium ....	6, 105	„ Iodide ....	2, 465
„ Silver ....	6, 198	„ Nuclei ....	7, 170
„ Sodium ....	6, 103	„ „ aldehydes of ....	7, 195
„ Strontium ....	6, 106	„ substitution of, for	
„ Tellurium ....	6, 121	hyponitric acid ....	7, 75
„ Tin ....	6, 124	„ substitution of, for	
„ Tin and Bismuth....	6, 126	oxygen ....	7, 75
„ Tin and Lead ....	6, 127	„ theory (Kane's) ....	2, 429
„ Tin and Zinc ....	6, 126	Amido-iodide, mercuric ....	6, 81
„ Zinc ....	6, 122	Amidon ....	15, 73, 94
„ Zirconium ....	6, 110	Amidonitrocitraconanil ....	11, 326
Amalgamation of Gold-ores ....	6, 201	Amidonitraniline ....	11, 293
„ Silver-ores ....	6, 134	Amidonitroxanil ....	11, 313
Amaniline ....	11, 330	Amidonitroxanilic acid ....	11, 313
Amandin ....	18, 435	Amidophenase ....	11, 246
Amanitin ....	18, 214	Amidosulphobenzene ....	11, 347
Amarine ....	12, 194	Amidoxychloride, mercuric ....	6, 88
Amarone ....	12, 208	Amodoxypropionic acid ....	18, 368
Amarythrin ....	12, 374, 976	Amisatin ....	13, 115
Amber ....	17, 430	Amilates ....	15, 100
Amber-camphor ....	14, 510	Ammelide ....	9, 476; 10, 548
„ oil ....	14, 323	Ammelide, formation of, by the	
„ preparation of succinic		action of anhydrous phosphoric	
acid from ....	10, 110	acid on urea ....	13, 403
Ambrein ....	18, 120	Ammeline ....	9, 474; 10, 348
Ambrite ....	17, 433	Ammoline, properties of ....	11, 275
Amethanes ....	7, 220	„ preparation of ....	11, 265
American petroleum, hydrocar-		Ammon, sulphates of ....	2, 455—461
bons obtained from ....	16, 532	Ammon-argentammonium, oxal-	
American process of amalgamation	6, 134	ate ....	13, 529
Amiano naphtha ....	16, 439	Ammonia, action of, on organic	
Amianth ....	3, 407	compounds ....	7, 140
Amidanisate of ammonium ....	13, 144	„ „ of, on zinc-	
„ silver ....	13, 144	ethyl....	13, 503
Amidanisic acid ....	13, 143	Ammonia-alum....	3, 318
Amide, mercuric, compounds of		„ „ with Potash Alum	3, 323
with basic mercuric nitrate....	6, 94	„ aqueous ....	2, 423
Amide, mercuric, with mercuric		„ bases, action of zinc-	
bromate ....	6, 83	ethyl on ....	13, 503
Amide, mercuric, with trisul-		„ -chrome-alum ....	4, 142
phate of mercuric oxide ....	6, 79	„ compounds of ....	2, 426
Amide, mercurous, with trisul-		„ compound of, with	
phate of mercurous oxide ? ....	6, 78	aesculetin ....	16, 25



Ammonia, compound of, with		Ammonia, compound of, with	
Antimonic Oxide ....	4, 371	Zinc-arsenate ....	5, 50
„ compound of, with		„ with Zinc-oxide ....	5, 35
Chloride of Alumi-		„ with Zinc-sulphate....	5, 37
num ....	3, 320	„ decompositions of ....	2, 421
„ with Chromium Ter-		„ formation of ....	2, 417
fluoride ....	4, 143	„ formation of, in the	
„ with Cobaltous Ox-		eremacausis of ni-	
alate ....	9, 161	trogenous organic	
„ and Cupric Oxide,		bodies ....	7, 92, 94
Acetate of ....	8, 326	„ formation of, in fer-	
„ and Cupric Oxide,		mentation and pu-	
Carbonate of ....	5, 448	trefaction....	7, 97
„ with Cupric Oxa-		„ formation of, by the	
late ....	9, 165	action of nitric acid	
„ with Cupric Cyanu-		on organic com-	
rate ....	9, 455	pounds ....	7, 124
„ with Cupric Oxide ....	5, 447	„ gas, absorption of,	
„ with Cupric Sulpho-		by volatile oils ....	7, 168
cyanide ....	8, 94	„ gas, liquefaction and	
„ with Cuprous Oxide	5, 447	solidification of ....	2, 420
„ with Cuprous Sulpho-		„ gas, maximum ten-	
cyanide ....	8, 93	sion of, at different	
„ with Cyanide of Mer-		temperatures 1, 261; 2, 503	
cury ....	8, 17	„ gas, properties of ....	2, 420
„ with Ethylchloride		Ammonia-iron alum ....	5, 262
of Platinum ....	8, 390	„ -manganese alum ....	4, 233
„ with Ferrocyanide of		„ memoirs relating to....	2, 369
Zinc ....	7, 490	„ presence of, in the air	2, 411
„ with Glyoxal ....	12, 504	„ preparation of ....	2, 420
„ with Mellitate of Pal-		„ reaction of, with cy-	
ladium ....	10, 13	anogen in aqueous	
„ with Mercurous Bro-		solution ....	7, 388
mate ? ....	6, 83	„ real, amount of, in	
„ with Naphthionate of		aqueous ammonia	
Silver ....	14, 115	of different densities	2, 425
„ with Cenanthol ....	12, 449	„ -salts ....	2, 426
„ with Oxalate of Nickel	9, 163	„ -salts, solubility of, in	
„ with Oxide of Cad-		alcohol ....	8, 265
mium ....	5, 61	„ Acetates ....	8, 294
„ with Phosphoric Oxide	2, 440	„ Aconitates ....	11, 405
„ with Phlorizon ....	16, 16	„ Alloxanate ....	10, 161
„ with Platinocyanide		„ Aluminate ....	3, 318
of Cobalt ....	8, 55	„ Amidanilate ....	13, 144
„ with Platinocyanide		„ Amylphosphate ....	11, 51
of Copper....	8, 56	„ Amylsulphate ....	11, 56
„ with Platinocyanide		„ Amylsulphite ....	11, 53
of Nickel ....	8, 55	„ Amylxanthate ....	11, 61
„ with Protocyanide of		„ Anacardate ....	17, 521
Palladium ....	8, 59	„ Anchoate ....	13, 375
„ with Platinocyanide		„ Angelate ....	10, 415
of Silver ....	8, 58	„ Anisate ....	13, 126
„ with Platinocyanide		„ Antimoniates ....	4, 372
of Zinc ....	8, 55	„ Antimonite....	4, 372
„ with Prussian blue....	7, 445	„ Antitartrate ....	10, 367
„ with Rue-oil ....	14, 492	„ Apocrenate....	17, 470
„ with Silver - cyanu-		„ Apophyllite ....	13, 155
rate ....	9, 457	„ Arachidate ....	17, 371
„ with Silver-oxide ....	6, 172	„ Argentate ....	6, 172

Ammonia-salts (*continued*): Ar-

gento-bromate ....	6, 175
Argento-chromate ....	6, 184
Argento-hyposulphate ....	6, 174
Argento-nitrite ....	6, 176
Argento-perchlorate ....	6, 176
Argento-seleniate ....	6, 175
Argento-sulphate ....	6, 174
Arseniates ....	4, 287
Arsenites ....	4, 287
Aspartate ....	10, 234
Aurate ....	6, 222
Aurite ....	6, 222
Benzoate ....	12, 38
Benzoglycolate ....	12, 66
Bibromobutyrate ....	10, 137
Bibromophloretate ....	13, 331
Bichlorosulphosome- thylate ....	7, 303
Bichromate of, with protochloride of mercury ....	6, 115
Biethylmeconate ....	12, 434
Bihydrotellurate ....	4, 414
Binitrobenzoate ....	12, 135
Binitrophloretate ....	13, 332
Binitrosalicylite ....	12, 315
Bisulphetholate ....	12, 516
Bisulphite, compound of, with Acetone ....	13, 469
Bisulphite, with Ani- sylvous acid ....	13, 122
Bisulphite with Bitter Almond oil ....	12, 27
Bisulphite, with Cu- minol ....	14, 147
Bisulphite, with Gly- oxal ....	12, 504
Bisulphite, with Ni- trobenzaldide ....	12, 121
Bisulphite, with Cen- anthol ....	12, 449
Bisulphite, with Rue oil ....	14, 492
Bisulpho - hydrokino- nate ....	16, 241
Bisulphometholate ....	12, 484
Bithiobenzolate ....	11, 237
Borates ....	2, 435
Bromacetate ....	12, 533
Bromate ....	2, 469
Bromomercurate ....	6, 82
Butyrate ....	10, 84
Camphorates ....	14, 456
Caprate ....	14, 487
Caproate ....	11, 416
Carbolate ....	11, 151
Carbonates ....	2, 430
Cetrarate ....	17, 24

Ammonia, Chelidonate ....	12, 415
Chloracetate ....	11, 70
Chloranilamate ....	11, 241
Chloranilate ....	11, 191
Chlorate ....	2, 480
Chlorite ....	2, 479
Chlorobenzoate ....	12, 114
Chloroborate ....	2, 481
Chlorocarbonate ....	2, 480
Chlorocinnamate ....	13, 296
Chloromercurite ....	6, 83
Chloroniceate ....	11, 177
Chlorosulphosomethy- late ....	7, 301
Cholate ....	18, 49
Chromate ....	4, 141
Chromite ....	4, 140
Chrysanilate ....	12, 331
Cinnamate ....	13, 274
Citraconate ....	10, 419
Citrates ....	11, 445
Cobalto-bromate ? ....	5, 341
Cobalto-hyposulphate ....	5, 339
Cobalto-nitrate ....	5, 342
Comenamate ....	11, 394
Comenate ....	11, 384
Crenate ....	17, 467
Cuminate ....	14, 150
Cupro-bromate ....	5, 452
Cupro-fumarate ....	10, 30
Cupro-hyposulphate ....	5, 448
Cupro-iodate ....	5, 452
Cupro-mellitate ....	10, 11
Cupro-nitrate ....	5, 455
Cupro-sulphate ....	5, 449
Cyanate ....	8, 65
Cyanurate ....	9, 452
Dialurate ....	10, 157
Elaïdate ....	17, 77
Ellagate ....	16, 187
Ethionate ....	8, 433
Ethylsulphite ....	8, 408
Ethylsulphobenzoate ....	12, 63
Euchroate ....	10, 20
Eugenate ....	14, 204
Euxanthate ....	17, 533
Ferrite ? ....	5, 260
Fluoborate ....	2, 489
Formiate ....	7, 276
Formiate of, with Cyanide of Mercury ....	8, 26
Fulminurate ....	10, 558
Fumarate ....	10, 25
Gallate ....	12, 405
Gambodate ....	17, 417
Glycerate ....	13, 570
Glycocholate ....	18, 59
Glyoxalate ....	12, 506 ; 13, 434
Hemipinate ....	14, 431



Ammonia, Hippurate ....	12, 75	Ammonia, Metatartrate ....	10, 328
„ Hydriodate....	2, 468	„ Methybinittrosalicylate	12, 310
„ Hydriodite ....	2, 468	„ Molybdate ....	4, 66
„ Hydrobromate ....	2, 469	„ and Zinc Molybdate	5, 48
„ Hydrobromate of,		„ Mucate ....	11, 504
containing sesqui-		„ Muriate ....	2, 478
chloride of iron ....	5, 262	„ Mycomelate ....	10, 183
„ Hydrochlorate ....	2, 478	„ Naphthionate ....	14, 112
„ Hydrochlorate and		„ Niccolate ....	5, 379
Stannite ....	5, 95	„ Niccolo-iodate ....	5, 382
„ Hydrofluates ....	2, 488	„ Niccolo-nitrate ....	5, 384
„ Hydrofluat of, with		„ Niccolo-sulphate ....	5, 381
Fluoride of Alumi-		„ Nitrate ....	2, 490
num ....	3, 320	„ Nitrite ....	2, 489
„ Hydrofluat of, with		„ Nitrobenzoate ....	12, 123
Sesquifluoride of		„ Nitrobichlorocarbolate	11, 210
Chromium ....	4, 143	„ Nitrocinnamate ....	13, 301
„ Hydroseleniates ....	2, 464	„ Nitrococussate ....	13, 26
„ Hydrosulphates ....	2, 451	„ Nitrohippurate ....	12, 130
„ Hydrosulphate of,		„ Nitrophthalates ....	13, 29
with Tersulphide of		„ Nitrosalicylate ...	12, 308
Chromium ...	4, 142	„ Nitrosalicylite ....	12, 305
„ Hydrosulphite ....	2, 452	„ Nitrosopelargonate....	13, 372
„ Hydrosulphocarbonate	2, 463	„ Nitrotoluylate ....	13, 22
„ Hypochlorate ? ....	2, 480	„ Œnanthate ....	12, 456
„ Hypochlorite ....	2, 479	„ Œnanthylate ....	12, 453
„ Hypohydrosulphate	2, 452	„ Oleate ....	17, 69
„ Hypohydrosulphite....	2, 453	„ Osmiamate ....	6, 415
„ Hypophosphite ....	2, 411	„ Osmiate ....	6, 415
„ Hyposulpharsenite....	4, 288	„ Opianate ....	14, 429
„ Hyposulphate ....	2, 458	„ Oxalates ....	9, 122
„ Hyposulphite ....	2, 454	„ Oxamate ....	13, 536
„ Hypovanadate ....	4, 96	„ Oxanilate ....	11, 311
„ Iodate ....	2, 409	„ Oxurate ....	10, 170
„ Iodide? ....	2, 467	„ Palmitate ....	16, 360
„ Iodomercurate ....	6, 80	„ Pectate ....	15, 406
„ Iodomercurite ....	6, 80	„ Pelargonate ....	13, 370
„ Isamate ....	13, 110	„ Perchlorate....	2, 480
„ Isatosulphite ....	13, 56	„ Phosphates....	2, 441
„ Isethionate....	8, 429	„ Phosphite ....	2, 441
„ Isobiglycolethylenate	15, 234	„ Phthalamate ....	13, 30
„ Isotartrate ....	10, 331	„ Phthalate ....	13, 12
„ Itaconate ....	10, 426	„ Picramate ....	11, 244
„ Jalapinolate ....	16, 402	„ Picrate ....	11, 220
„ Kinate ....	16, 227	„ Piperate ....	15, 9
„ Kinovate ....	18, 25	„ Platinat ....	6, 296
„ Lactamate, acid ....	11, 471	„ Permanganate ....	4, 231
„ Lactate ....	11, 481	„ Plumbite ....	5, 158
„ Leucate ....	15, 60	„ Propionate ....	9, 405
„ Lichenate ....	16, 196	„ Purpurate ....	10, 192
„ Malate ....	10, 213	„ Pyrogallate....	11, 400
„ Maleate ....	8, 151	„ Pyromucate ....	10, 385
„ Mandelate ....	12, 58	„ Pyrophosphate ....	2, 442
„ Meconate ....	12, 427	„ Pyrotartrates ....	11, 87
„ Mellitate ....	10, 3	„ Racemate ....	10, 349
„ Mercurate ....	6, 77	„ Rhodiate ....	6, 364
„ Mesaconate....	10, 428	„ Rhodizonate ....	10, 400
„ Meta-antimoniate ....	4, 372	„ Roccellate ....	16, 476
„ Metaphosphate ....	2, 442	„ Rubianate ....	16, 40

Ammonia, Saccharate ....	11, 516	Ammonia and Alumina Tartrate	10, 292
„ Salicylate ....	12, 250	„ and Arsenious acid,	
„ Salicylite ....	12, 230	Racemate ....	10, 355
„ Sebrates ....	14, 497	„ and Arsenious acid,	
„ Selenites ....	2, 464	Tartrate ....	10, 296
„ Silicate ....	3, 368	„ and Baryta, Carbonate	3, 163
„ Stannate ....	5, 93	„ and Cerous oxide, Car-	
„ Stearate ....	17, 107	bonate ....	3, 272
„ Styphnate ....	11, 231	„ and Cerous oxide, Sul-	
„ Suberate ....	13, 208	phate ....	3, 272
„ Succinate ....	10, 115	„ and Chromic oxide,	
„ Sulphanilate ....	11, 297	Carbonate....	4, 142
„ Sulphates ....	2, 462	„ and Chromic oxide,	
„ Sulphate of, with		Sulphate ....	4, 142
cupric malate ....	10, 225	„ and Cobalt oxide,	
„ Sulphindigotate ....	13, 62	Carbonate....	5, 339
„ Sulphisatanate ....	13, 106	„ and Cobalt-oxide, Ni-	
„ Sulphites ....	2, 457	trate ....	5, 342
„ Sulphocamphorate ....	13, 379	„ and Cobalt-oxide,	
„ Sulphocarbonate ....	2, 462	Sulphate ....	5, 340
„ Sulphophœnicate ....	13, 96	„ and Cupric oxide,	
„ Sulphophosphate ....	2, 463	Chromate ....	5, 468
„ Sulphosalicylite	12, 276, 277	„ and Cupric oxide,	
„ Sulphosomethylate ....	7, 299	Sulphates ....	5, 450
„ Sulphosuccinate ....	10, 130	„ Cupric oxide, and	
„ Sulphotellurite ....	4, 415	Magnesia, Sulphate	5, 463
„ Sulphotoluate ....	12, 231	„ and Ferric oxide, of	
„ Sulphovinate ....	8, 419	Carbonate....	5, 260
„ Sylvate ....	17, 320	„ and Ferric oxide,	
„ Tannate ....	15, 463	Phosphate ....	5, 261
„ Tantalate ....	4, 8	„ and Ferric oxide, Sul-	
„ Tartramate....	10, 344	phate ....	5, 262
„ Tartrates ....	10, 273	„ and Ferrous oxide,	
„ Tartrelate ....	10, 334	Phosphate....	5, 260
„ Tartromalate, acid ....	10, 274	„ and Ferrous oxide,	
„ Tartrovinatè ....	10, 341	Sulphate ....	5, 261
„ Tellurates ....	4, 414	„ and Glucina, Carbonate	3, 300
„ Tellurites ....	4, 414	„ and Glucina, Oxalate	13, 520
„ Terchloracetate ....	9, 211	„ and Lead-oxide, Hy-	
„ Terchlorosulphosome-		posulphite....	5, 158
thylate ....	7, 352	„ and Lead, Malate ....	10, 224
„ Thiacetate ....	13, 448	„ and Lead-oxide, Sul-	
„ Thionaphthamate ....	14, 116	phate ....	5, 159
„ Thionurate ....	10, 184	„ and Lithia, Phosphate	3, 132
„ Titanate ....	3, 483	„ Sulphate	3, 132
„ Toluylate ....	13, 9	„ and Lime, Arseniate	4, 306
„ Tungstate ....	4, 37	„ Malate ....	10, 219
„ Uranate ....	4, 183	„ and Magnesia, Arse-	
„ Urate ....	10, 467	niate ....	4, 307
„ Uroxanate ....	10, 478	„ and Magnesia, Borate	3, 245
„ Usnate ....	17, 50	„ and Magnesia, Car-	
„ Valerate ....	11, 30	bonate ....	3, 244
„ Vanadiates ....	4, 97	„ and Magnesia, Hypo-	
„ Vanadite ....	4, 96	Sulphite ....	3, 247
„ Xanthate ....	8, 451	„ and Magnesia, Meta-	
„ and Acetone, with		phosphate....	3, 247
tannic acid ....	15, 472	„ and Magnesia, Nitrate	3, 248
„ and Alumina, Carbon-		„ and Magnesia, Ox-	
ate of ....	3, 318	alate ....	9, 132



Ammonia and Magnesia, Phosphate ....	3, 254	Ammonia and Osmium-sesquioxide, Nitrate ....	6, 416
„ and Magnesia, Phosphite ....	3, 245	„ and Osmium-sesquioxide, Sulphate ....	6, 415
„ and Magnesia, Sulphate ....	3, 248	„ and Palladious Oxide, Nitrate ....	6, 353
„ and Magnesia, Sulphite	3, 247	„ and Platinous Oxide, Sulphite ....	6, 298
„ and Manganic Oxide, Sulphate ....	4, 233	„ and Potash, Citrate	11, 446
„ and Manganous Oxide, Arseniate ....	4, 315	„ and Potash, Oxalate ? ....	9, 126
„ and Manganous Oxide, Carbonate ....	4, 231	„ and Potash, Pyrophosphate....	3, 71
„ and Manganous Oxide, Hydrochlorate	4, 233	„ and Potash, Racemate ....	10, 350
„ and Manganous Oxide, Phosphate ....	4, 231	„ and Potash, Sulphate	3, 71
„ and Manganous Oxide, Sulphate ....	4, 233	„ and Potash, Tartrate	10, 280
„ and Mercuric Oxide, Acetate ....	8, 332	„ and Potash, Tungstate ....	4, 40
„ and Mercuric Oxide, Hydrofluatate ....	6, 91	„ and Silver-oxide, Cyanurate ....	9, 457
„ and Mercuric Oxide, Hyposulphite ....	6, 78	„ and Silver-oxide, Hyposulphite ....	6, 173
„ and Mercuric Oxide, Sulphate ....	6, 80	„ and Silver-oxide, Sulphite ....	6, 174
„ and Mercuric Oxide, Tungstate ....	6, 111	„ and Soda, Antitratrate ....	10, 367
„ and Mercurous Oxide, Acetate ....	8, 332	„ and Soda, Arseniate	6, 298
„ and Mercurous Oxide, Nitrate ....	6, 91	„ and Soda, Citrate ....	11, 448
„ and Molybdic Oxide, Carbonate ....	4, 68	„ and Soda, Phosphate	3, 118
„ and Molybdic Oxide, Hydrofluatate ....	4, 69	„ and Soda, Pyrophosphate ....	3, 118
„ and Molybdic Oxide, Tungstate ....	4, 79	„ Soda, and Manganous Oxide, Pyrophosphate ....	4, 240
„ and Molybdous Oxide, Carbonate ....	4, 68	„ and Soda, Racemate	10, 351
„ and Molybdous Oxide, Hydrofluatate ....	4, 69	„ and Soda, Sulphate	3, 119
„ and Molybdous Oxide, Hydrochlorate	4, 69	„ and Soda, Tartrate....	10, 282
„ and Molybdous Oxide, Phosphate ....	4, 68	„ and Stannic Oxide, Nitrate ....	5, 95
„ and Nickel - oxide, Carbonate....	5, 379	„ and Thorina, Carbonate ....	3, 335
„ and Nickel - oxide, Hydrosulphate ....	5, 380	„ and Titanic Oxide, Carbonate ....	3, 480
„ and Nickel - oxide, Phosphate ....	5, 380	„ and Uranic Oxide, Acetate ....	8, 307
„ and Nickel - oxide, Racemate....	10, 359	„ and Uranic Oxide, Hydrochlorate ....	4, 186
„ and Nickel - oxide, Sulphate ....	5, 381	„ and Uranic Oxide, Sulphate ....	4, 185
„ and Nitric Oxide, Sulphite ....	2, 492	„ and Uranous Oxide, Carbonate ....	4, 184
		„ and Uranous Oxide, Chloride ....	4, 186
		„ and Vanadic Oxide, Carbonate ....	4, 98
		„ and Vanadic Oxide, basic Hydrobromate ....	4, 98

Ammonia and Zinc-oxide, Car-			Ammonio-chloride of Cyanogen	8, 145
bonate ....	5, 36		"    "    Iridium ....	6, 381
"    and Zinc-oxide, Meta-			"    "    Iron ....	5, 262
phosphate ....	5, 37		"    "    Lead ....	5, 159
"    and Zinc-oxide, Mo-			"    "    Mercury ....	6, 83
lybdate ....	5, 48		"    "    Nickel ....	5, 383
"    and Zinc-oxide, Phos-			"    "    Palladium	6, 351
phate ....	5, 36		"    "    Phosphorus	2, 481
"    and Zinc-oxide, Py-			"    "    Platinum	6, 305
rophosphate ....	5, 37		"    "    Rhodium ?	6, 364
"    and Zinc-oxide, Sul-			"    "    Silicium ....	3, 368
phate ....	5, 39		"    "    Silver ....	6, 176
"    Ferrous Oxide and			"    "    Strontium	3, 180
Zinc-oxide, Sulphate			"    "    Sulphur 2, 483—487	
of ....	5, 314		"    "    Sulphur with	
"    and Zirconia, Car-			ammonio-	
bonate of ....	3, 347		sulphide of	
"    and Zirconia, Sulphate			nitrogen	2, 493
of ....	3, 347		"    "    Tin ....	5, 93
"    separation of Ethyla-			"    "    Titanium	3, 483
mine from....	13, 480		"    "    Uranium....	4, 186
"    sources of ....	2, 417		"    "    Zinc ....	5, 41
"    theories relating to	2, 428		"    "    Zirconium	3, 347
Ammoniacal Turpethum ....	6, 79		Ammonio-chlorobromide of Pla-	
Ammonias, compound, formation			tinum ....	6, 306
of ....	7, 179		Ammonio-chloroplatinous Oxalate	9, 170
Ammonides ....	7, 23		Ammonio-chromic Tartrate ....	10, 294
Ammonio-antimonious Antitar-			Ammonio-cinnamate of Barium	13, 275
trate....	10, 368		Ammonio-citrate of Lead ....	10, 456
"    "    Oxalate			Ammonio-cobaltic Oxalate ....	9, 162
9, 148; 13, 523			"    "    Cyanide of	
"    "    Tartrate	10, 298		Copper ....	8, 11
Ammonio-argentic Benzosulpho-			"    "    Cyanide of	
phenamidate	12, 157		Nickel ....	7, 501
"    "    Bisuccinami-			"    "    Cyanide of	
date ....	10, 116		Silver ....	8, 32
Ammonio-azaphosphate, Ferric	5, 261		Ammonio-cobaltoso-cobaltic Oxa-	
Ammonio-bromate of Cadmium	5, 63		late ....	9, 163
"    "    Nickel ....	5, 383		Ammonio-cobaltous Oxalate ....	9, 162
"    "    Zinc ....	5, 40		Ammonio-cupric Fulminurate ....	10, 561
Ammonio-bromide of Cadmium	5, 62		"    Mellitate ....	10, 11
Ammonio-bromides of Cobalt ....	5, 340		"    Oxalate 9, 165; 10, 535	
"    "    Copper ....	5, 452		Ammonio-cyanides of Copper	
Ammonio-bromide of Cyanogen	8, 139		8, 3; 10, 505; 12, 497	
"    "    Mercury ....	6, 82		Ammonio-cyanide of Gold ....	8, 37
"    "    Nickel ....	5, 382		"    "    Platinum....	8, 45
"    "    Phosphorus	2, 470		"    "    Silver ....	8, 29
"    "    Silver ....	6, 175		Ammonio-ferric Citrate 10, 358; 11, 457	
"    "    Strontium	3, 180		"    Oxalate ....	9, 158
"    "    Zinc ....	5, 40		"    Racemate ....	10, 358
Ammonio-cadmic Oxalate ....	10, 533		Ammonio-ferridecyanide of	
Ammonio-carbonate of Platinous			Nickel ....	7, 500
Oxide ....	6, 298		Ammonio-ferrocyanide of Copper	8, 9
Ammonio-chlorides of Antimony	4, 373		"    "    Mercury	8, 24
Ammonio-chloride of Arsenic ....	4, 289		"    "    Nickel	7, 501
"    "    Bismuth ....	4, 444		Ammonio-fluoride of Arsenic ....	4, 290
"    "    Cadmium	5, 63		"    "    Boron ....	2, 489
"    "    Cobalt ....	5, 342		"    "    Silicium ....	3, 368
"    chlorides Copper ....	5, 453		Ammonio-gallates of Mercury ....	12, 411



Ammonio-hyposulphate of Cadmium	5, 61	Ammonio-sulphide of Nitrogen with Ammonio-chloride of Sulphur	2, 493
„ „ Nickel....	5, 320	Ammonio-sulphocyanide of Cadmium	8, 87
„ „ Zinc ....	5, 37	„ „ Cobalt	8, 89
Ammonio-hyposulphite of Nickel	5, 380	„ „ Nickel	8, 90
„ „ Zinc	5, 37	„ „ Zinc....	8, 86
Ammonio-iodate of Zinc	5, 40	Ammonio-uranic Oxalate	9, 145
Ammonio-iodide of Bismuth	4, 444	Ammonio-uranous Oxalate	9, 144
„ Cadmium	5, 62	Ammonium	2, 428
„ Cobalt	5, 340	„ Amalgam	6, 67
„ Copper	5, 450	„ Auridcyanide	8, 38
„ Cyanogen	8, 138	„ Aurocyanide	8, 37
„ Lead	5, 159	„ Bromide	2, 469
„ Mercury	6, 80	„ Bromo-ferrocyanide..	7, 451
„ Nickel	5, 381	„ Chloride	2, 478
„ Palladium	6, 350	„ Chloride of, with Bicyanide of Platinum	8, 47
„ Platinum	6, 299	„ Chloride of, with Cyanide of Mercury...	8, 17
„ Silver	6, 175	„ Chloride of, with Urea	13, 404
„ Tin....	5, 93	„ Chloriridiate	6, 382
„ Zinc	5, 40	„ Chloro - ferrocyanide	7, 451
Ammonio-magnesian Oxalates	9, 158	„ Chloromercurate	6, 84
Ammonio-maleate of Copper	8, 159	„ Chloropalladiate	6, 353
Ammonio-manganous Oxalate	9, 147; 13, 521	„ Chloropalladite	6, 352
Ammonio-mercuric Oxalate	13, 528	„ Chloroplatinate	6, 307
Ammonio-mercuric and Ammonio-mercurous Benzoates	12, 44	„ Chloroplatinite	6, 307
„ „ Camphorates	14, 462	„ Chlororhodiante	6, 365
„ „ Citrates	11, 460	„ Chlorostannate	5, 94
„ „ Suberates	13, 212	„ Chlorostannite	5, 94
„ „ Tartrates	10, 323	„ Chlorotellurate	4, 415
Ammonio-nickel Oxalate	9, 164	„ Chlorotellurite	4, 415
Ammonio-nitrate of Platinic oxide ?	6, 311	„ Cobaltidcyanide	7, 493
„ Platinic oxychloride	6, 311	„ Cuprocyanide	8, 3
„ „ Platinous oxide	6, 310	„ Cyanide	7, 410
„ „ Silver-oxide	6, 177	„ Ferriocyanide	7, 452
Ammonio-oxalate of Silver-oxide	13, 529	„ Ferrocyanide	7, 450
Ammonio-oxide of Iridium	6, 381	„ Fluoride	2, 488
„ „ Mercury	6, 77	„ Fluoplatinate	6, 310
„ „ Osmium	6, 415	„ Hydrothiosulphocyanide	8, 99
„ „ Platinum	6, 296	„ Iodide	2, 468
Ammonio-oxyplatinous Oxalate	9, 170	„ Iodoplatinate	6, 300
Ammonio-palladious Oxalate	9, 171	„ Iodostannite	5, 93
Ammonio-phosphate of Platinic oxychloride	6, 309	„ Iodotellurate	4, 415
Ammonio-stannous Oxalate	9, 153	„ Isatide	13, 53
Ammonio-sulphate of Cadmium	5, 62	„ Nitroprusside	8, 130
„ „ Cobalt	5, 339	„ Oxide, chrysindide of	12, 15
„ „ Copper	5, 448	„ Periodide	2, 468
„ „ Manganese	4, 232	„ Platinidcyanide	8, 47
„ „ Nickel	5, 380	„ Platinocyanide	8, 46; 10, 566
„ „ Platinum	6, 298	„ Platino - platinidcyanide	8, 46
„ „ Platinic oxychloride	6, 310—318	Ammonium-bases, decomposition of, by heat	7, 180
„ „ Silver	6, 174	Ammonium-salt of Pseudosulphocyanogen	8, 112
Ammonio-sulphides of Arsenic....	4, 288		

Ammonium Selenide ....	2, 464	Ammonium and Silicium, Fluoride	3, 368
„ Selenocyanide ....	8, 122	„ and Silver, Chloride	6, 176
„ Sulphantimoniate ....	6, 372	„ and Silver, Chlorosulphate	13, 74
„ Sulpharseniate ....	4, 289	„ and Sodium, Sulpharseniate	4, 298
„ Sulpharsenite ....	4, 288	„ and Tantalum, Fluoride	4, 9
„ Sulphides ....	2, 451	„ and Titanium, Chloride	3, 484
„ Sulphocyanide ....	8, 76	„ and Titanium, Fluoride	3, 484
„ Sulphosinapate ....	10, 34	„ and Tungsten, Fluoride	4, 38
„ Sulphomolybdates ....	4, 48	„ and Vanadium, Chloride	4, 98
„ Sulphoplatinate ....	6, 298	„ and Zinc, Chloride....	5, 42
„ Sulphotungstate ....	4, 38	„ and Zinc, Cyanide....	7, 423
„ Sulphovanadate ....	4, 98	„ and Zinc, Iodide ....	5, 40
„ Sulphovanadite ....	4, 98	„ and Zinc, Malate....	10, 222
„ Sulphostannate ....	5, 93	„ -theory of Berzelius	2, 428
„ Thiocyanide ....	8, 114	Amniotic acid ....	10, 260
„ and Bismuth, Chloride	4, 444	Amorphism ....	1, 102—108
„ and Bismuth, Oxalate	13, 524	„ Ampere's theory of	1, 147
„ and Cadmium, Chloride	5, 63	„ difference of properties resulting from	1, 102
„ and Cobalt, Fluoride	5, 342	„ Fuchs's, theory of....	1, 103
„ and Copper, Chlorides	5, 453	Amorphous bodies ....	1, 8
„ and Copper, Fulminate	9, 300	„ bodies, method of producing	1, 103
„ and Copper, Styphnate	11, 235	„ and crystalline, substances, both	1, 184
„ and Gold, Chloride	6, 225	„ Phosphorus ....	2, 108
„ and Gold, Iodide ....	6, 225	„ Quinine (Winckler's) ....	17, 305
„ and Hydrogen, Selenide	2, 464	„ Sulphide of Mercury	6, 25
„ and Hydrogen, Sulphide	2, 452	Ampelic acid ....	12, 272
„ and Iodine, Chloride	2, 487	Amphibia, phosphorescence of	1, 182
„ and Iridium, Chlorides	6, 382	Amphibole ....	3, 405
„ and Iron, Chlorides	5, 263	Amphid salts ....	2, 15
„ and Lead, Chloride	5, 160	Amphilogite, or Didrimite	3, 452
„ and Lead, Iodide ....	5, 159	Amphodelite ....	3, 433
„ and Lead, Tartrate..	10, 313	Amygdalate of Ethyl ....	15, 430
„ and Magnesium, Chloride	3, 248	Amygdalates, metallic....	15, 429
„ and Magnesium, Ferrocyanide....	7, 485	Amygdalin ....	15, 341, 422
„ and Magnesium, Sulpharseniate	4, 308	„ amorphous ....	15, 424
„ and Mercury, Bromide	6, 83	„ decomposition of, by emulsin or synaptase	7, 98, 389
„ and Mercury, Chloride	6, 89	„ Döbereiner's, identical with Almond-legumin	18, 433
„ and Mercury, Iodide	6, 82	„ Hydrates of	16, 428
„ and Nickel, Chloride	5, 383	<i>Amygdalus communis</i> , fatty oil from the kernels of	17, 92
„ and Nickel, Cyanide	7, 498	Amyl ....	11, 3
„ and Nickel, Fluoride	5, 384	„ from Boghead Cannel Coal	13, 386
„ and Osmium, Chlorides	6, 416		
„ and Potassium, Ferrocyanide	10, 503; 12, 496		
„ and Ruthenium, Chloride	6, 401		



Amyl, Acetate ....	11, 69	Amylic Alcohol, active and in-	
„ Allophanate ...	11, 74	active ....	11, 12
„ Arachidate ....	17, 375	„ combinations of	11, 17
„ Benzoate* ....	12, 84	„ copulated acids	
„ Biborate ....	11, 47	produced by,	
„ Bibromacetate ....	13, 532	with Bisulphide	
„ Bioxysulphocarbonate ....	11, 62	of Carbon and	
„ Bisulphide ? ....	11, 40	Phosphorous Acid	7, 224
„ Borate, Tribasic ...	11, 46	„ decompositions	
„ Bromacetate ....	12, 534	of ....	11, 14
„ Bromide ....	11, 42	„ expansion of, by	
„ Caproate ....	11, 419	heat ....	1, 226—231
„ Carbolate ....	12, 272	„ preparation of	11, 11
„ Carbonate ....	11, 45, 114	„ production of, in	
„ Chloride....	11, 42	vinous fermen-	
„ Chloroformiate ....	11, 66	tation ....	15, 276
„ Cyanide....	11, 67	„ properties of	11, 13
„ Cyanide, preparation of		Amylic Ethers ....	7, 220; 11, 7
Caproic acid from	11, 415	„ Glycol ....	13, 557
„ Cyanurate ....	11, 74	„ Oxide ....	11, 7
„ Formiate ....	11, 66	„ Mercaptan ....	11, 38
„ Hydrated Oxide ....	11, 9	Amyl-lepidine ....	14, 122
„ Hydride ....	11, 6	Amyl-malates ....	11, 79
„ Iodacetate ....	13, 531	Amyl-nicotine ....	14, 238
„ Iodide ....	11, 41	„ -œnanthylic Ether	13, 202
„ Nitrate ....	11, 64	Amylogen ....	15, 94
„ Nitrite ....	11, 63	Amyloid ....	18, 334
„ Oxalate ....	11, 72	Amyl-oxalates ....	11, 73
„ Oxide ....	11, 7	Amyl-palmitic Ether	16, 380
„ Palmitate ....	16, 380	Amyl-phloretic Acid	13, 315
„ Phosphate, Tribasic	11, 527	Amyl-phosphates	11, 50
„ Phosphite ....	11, 47	Amyl-phosphoric Acid	11, 49
„ Pimelate ....	12, 466	Amyl-phosphorous Acid	11, 48
„ Salicylate, Neutral	12, 258	Amyl-piperidine	11, 124; 15, 17
„ Silicate, Bibasic....	11, 65	Amyl-salicylic Acid	12, 260
„ Stearate....	17, 123	Amyl-strychnine	13, 514
„ Sulphide ....	11, 38	Amyl-sulphates	11, 56—60
„ Sulphocarbonate	11, 60	Amyl-sulphites....	11, 53
„ Sulphocyanide	11, 68; 13, 461	Amyl-sulphuric Acid	11, 55
„ Terebilate ....	12, 469	Amyl-sulphurous Acid....	11, 50
„ Valerate....	11, 83	Amyl-tartaric Acid	11, 80
Amylamine ....	11, 105	Amyl-tartrates ....	11, 82
„ Carbonate ....	11, 106	Amylum ....	15, 73
„ Chloroplatinate	11, 107	Amyl-urea ....	11, 123
„ Hydrochlorate	11, 106	Amyl-urethane....	11, 114
„ Sulphate ....	11, 106	Amyl-xanthates	11, 61
Amylaniline ....	11, 330	Amyl-xanthic Acid	11, 60
Amylate of Benzylene...	12, 222	Amyrin....	17, 397
„ Methyl ...	11, 8	Amyris, Elemi-resin obtained	
„ Octyl ....	13, 202	from various species of	17, 413
Amylbenzolic Ether	12, 222	„ Caranna, resin of	17, 404
Amyl-caprylic Ether	13, 202	„ Kataf, frankincense ob-	
Amyl-cetylic Ether	16, 379	tained from ....	17, 427
Amylchinoline ....	13, 255	„ tomentosa, Tacamahac	
Amylene ....	11, 1	resin from ....	17, 430
„ Biacetate ....	13, 558	Anacardates ....	17, 521
„ Hydrate ....	13, 557	Anacardic Acid	17, 519
Amylic Alcohol	11, 9	Anacardium Orientale, fatty oil	
		from the kernels of	17, 93

Anachuita-tannic Acid....	15, 511	Anhydride, Benzo-cuminic	14, 157
„ wood, resin of	17, 446	„ Benzo-eugenie	14, 211
Analysis of organic compounds,		„ Benzoic	12, 93
elementary or ultimate	7, 86	„ Benzo-myristic	16, 216
Analcides	7, 23	„ Benzo-pelargonic	13, 373
Analcime	3, 439	„ Benzo-stearic	17, 123
Anatase	3, 474	„ Butyric	10, 88
Anatomical preparations, preser-		„ Camphoric	14, 467
vation of	7, 117	„ Caproic	11, 421
Anatto, <i>see</i> Annatto.		„ Caprylic	13, 202
Anaximander, his theory of		„ Cinnamic	13, 292
the four elements	1, 3	„ Citraconic	10, 435
Anchietine	18, 187	„ Cuminic	14, 159
Anchusin or Anchusic Acid, <i>see</i>		„ Cumino-eugenie	14, 213
Alkanet-red.		„ Fumaric	10, 32
Anchoate of Ethyl	13, 376	„ Lactic	11, 435, 501
Anchoates, metallic	13, 375	„ Myristic	16, 217
Anchoic Acid	13, 374	„ Nitric	2, 389
Andalusite	3, 412	„ Nitrocinnamic	13, 302
Andesine	3, 439	„ Oenantho-cuminic	14, 159
Andirin	16, 518	„ Oenanthylic	12, 462
Anemonic Acid	16, 268	„ Pelargonic	13, 373
Anemonin	16, 265	„ Phthalic	13, 14
Anethol	14, 191	„ Pyrotartaric	11, 101
„ crystallised variety of	14, 199	„ Racemic	10, 361
„ liquid variety of	14, 199	„ Roccellic	16, 477
„ oils almost wholly com-		„ Salicylic	12, 282
posed of	14, 195	„ Stearic	17, 131
„ and Quinine	17, 292	„ Succinic	10, 135
<i>Anethum Fœniculum</i> , volatile oil		„ Sulphuric	2, 176
of	14, 192	„ Tartaric	10, 336
Angelate of Oreoselone	12, 98	„ Terchlorophthalic	13, 18
Angelates, metallic	10, 415	„ Toluo-eugenie	14, 212
Angelic Acid	10, 413	„ Valeric	11, 37
„ Ether	10, 417	Anhydrides	7, 24
Angelica bitter	18, 215	„ of Organic Acids	7, 193
„ oil	14, 357	Anhydrite	3, 200
„ root, wax of	18, 158	Anilamide	12, 333
„ root, preparation of		Anilate of Methylene	12, 311
valerianic acid from	11, 25	Aniline	11, 246
„ root, resin of	17, 446	„ decompositions	11, 250
Angelicin	17, 446	„ formation	11, 202, 246
<i>Angræcum fragrans</i> , preparation		„ preparation	11, 247
of coumarin from	13, 322	„ properties of	11, 249
Angustura-bark, false, prepara-		„ reaction with Thiocetic	
tion of brucine from	17, 573	acid	13, 450
Angustura-bark, hard resin of	17, 446	„ reaction with Zinc-ethyl	13, 504
„ bitter	18, 215, 222	Aniline Salts	11, 256
„ oil	14, 357	„ Acetate	11, 262
Anhydracides	7, 24	„ Butyrate	11, 263
Anhydralydes	7, 24	„ Chloroaurate	11, 261
Anhydride, Abietic	18, 8	„ Chloroplatinate	11, 261
„ Acetic	8, 334	„ Citranilate	11, 467
„ Aceto-cinnamic	13, 293	„ Citrate	11, 462
„ Aceto-cuminic	14, 156	„ Citrobianilate	11, 469
„ Angelic	10, 416	„ with Fluoride of Silicium	11, 259
„ Anisic	13, 241	„ Gallate	12, 409
„ Aniso-eugenie	14, 213	„ Hydrated	11, 255
„ Benzo-cinnamic	13, 293	„ Hydriodate	11, 258



Aniline Hydrobromate....	11, 258	Animine, preparation of	11, 265, 266
„ Hydrochlorate....	11, 259	Animine, properties of....	11, 273
„ Mellitate ....	11, 263	Anions ....	1, 431, 434
„ Mercury-compounds of	11, 261	Anisate of Ethyl ....	13, 130
„ Metaphosphate ....	11, 257	„ Eugenyl ....	14, 213
„ Nitrate ....	11, 259	„ Methyl ....	13, 129
„ Oxalate ....	11, 262	Anisates, metallic ....	13, 126, 584
„ Oxanilate ....	11, 312	Anise-camphor....	14, 191
„ Phosphates ....	11, 256	Anisene....	13, 119
„ Picrate ....	11, 263	„ Hydrochlorate ?	13, 131
„ Pyrophosphate ....	11, 257	Anise-oil ....	14, 195
„ Succinate ....	11, 263	„ stearoptene of	14, 191
„ Sulphanilate ....	11, 298	Anishydramide....	13, 145
„ Sulphate ....	11, 258	Anisic Acid ....	13, 123
„ with Sulphate of Copper	11, 260	„ Anhydride ....	13, 241
„ Sulphite ....	11, 258	Anisidine ....	12, 266
„ Sulphobenzolate ....	11, 263	Anisine....	13, 146
„ Sulphocyanate....	11, 262	Aniso-eugenic Anhydride	14, 213
„ Tartrate ....	11, 263	Anisoic Acid ....	14, 503
„ Urea ....	11, 303 ; 12, 166	Anisoïn....	14, 197
„ Violet, occurrence of in the Sea-owl or Lump- fish ( <i>Aplysia depi-</i> <i>lans</i> ) ....	18, 421	Anisol ....	12, 261
Anilocyanic Acid ....	11, 301	Aniso-nitranisic Acid ....	13, 140
Animal Acids ....	7, 197	Anisosalicyl ....	13, 242
„ body, classification of constituents of, accord- ing to Liebig ....	18, 255	Anisuric Acid ....	13, 241
„ body, electric currents in ....	1, 336	Anisyl Bromide ....	13, 132
„ earth ....	3, 192	„ Chloride ....	13, 134
„ membranes, diffusion of gases through ....	1, 25	„ Hydride ....	13, 120
„ membranes, fermenta- tion of sugar in con- tact with ....	7, 99	„ Phenyl and Hydrogen, nitride of ....	13, 145
„ organism, alleged exist- ence of arsenic in ....	4, 250	Anisylous Acid....	13, 120
„ substances, occurrence of manganese in ....	4, 195	Anitrohumic Acid ....	17, 474
„ substances, preservation of ....	7, 100	Annatto, effect of sunshine on the colour of ....	7, 95
„ substances, products of dry distillation of ....	18, 256	„ red, resinous ....	16, 520
„ substances, putrefaction of ....	7, 97	Anode ....	1, 431
Animals, living, phosphorescence of ....	1, 181	Anorthite ....	3, 432
„ phenomena exhibited by the solid parts of, during putrefaction....	7, 103	Anoxoluin ....	18, 254
„ putrefying, phosphores- cence of ....	1, 189	Anthemine ....	18, 187
Anisalcohol ....	13, 119	<i>Anthemis nobilis</i> , bitter from the seeds of ....	18, 215
Anisaldehyde ....	13, 120	„ <i>nobilis</i> , essential oil of ....	10, 412
Anisamide ....	13, 143	„ <i>pyrethrum</i> , soft resin of ....	17, 447
Anisanilide ....	13, 145	Anthocyan ....	16, 522
Animé Oil ....	14, 358	Anthophyllite ....	3, 406
		Anthosiderite ....	5, 283
		Anthoxanthin ....	16, 513
		<i>Anthoxanthum odoratum</i> , pre- paration of cumarin from ....	13, 322
		Anthracene ....	16, 165
		Anthracenuse ....	16, 169
		Anthracite ....	2, 83
		Anthracoxene ....	17, 433
		Anthranilic Acid ....	12, 326
		Anthropic Acid ....	16, 365
		Antiar Upas, wax of ....	18, 158
		Antiarin ....	16, 217
		Antiar-resin ....	16, 218

Antichloristic Theory ....	2, 356	Antimonite of Cupric oxide ....	5, 475
Antigonite ....	3, 397	„ Ferrous oxide ....	5, 310
Antimonial Amalgam ....	6, 120	„ Potash ....	4, 375
„ Blende ....	4, 359	„ Lime ....	4, 389
„ Copper-glance ....	5, 476	„ Soda ....	4, 382
„ Nickel ....	5, 372	„ Stibethyl ....	9, 84
„ Phosphorus ....	1, 194	Antimonites ....	4, 330
„ Silver-blende ....	6, 190	<i>Antimonium crudum</i> ....	4, 337
„ Saffron ....	4, 359	„ <i>diaphoreticum ablu-</i>	
Antimoniatic of Ammonia ....	4, 372	<i>tum</i> ....	4, 377
„ Baryta....	4, 338	Antimoniuretted Hydrogen ....	4, 333
„ Cobalt-oxide ....	5, 353	Antimony ....	4, 316
„ Cupric oxide ....	5, 475	„ Alloys ....	4, 392
„ Ferrous oxide ....	5, 310	„ Bismuth and Tin,	
„ Lead-oxide ....	5, 175	alloys of ....	5, 104
„ Lime ....	4, 389	„ and Calcium, alloy....	4, 389
„ Manganous oxide ....	4, 391	„ and Gold, alloy ....	6, 238
„ Mercuric oxide....	6, 120	„ and Lead, alloy ....	5, 174
„ Mercurous oxide ....	6, 120	„ „ amalgam ....	6, 127
„ Nickel-oxide ....	5, 393	„ and Magnesium, alloy	4, 390
„ Potash....	4, 376	„ and Potassium, alloy	4, 374
„ Potash with Sul-		„ Potassium and Silver,	
phantimoniate		alloys of ....	6, 192
of Potassium....	4, 381	„ and Silicium, alloy....	4, 390
„ Silver-oxide ....	6, 189	„ Silver and Lead, sul-	
„ Soda ....	4, 382	phide of ....	6, 195
„ Stannic oxide ....	5, 103	„ and Strontium, alloy	4, 389
„ Uranous oxide ....	4, 391	„ Ammonio-pentachlo-	
„ Zinc oxide ....	5, 50	ride ....	4, 373
Antimoniates ....	4, 332	„ Ammonio-terchloride	4, 373
Antimonic Acid ....	4, 330	„ Arsenide ....	4, 391
„ Arsenate of ....	4, 392	„ and Potassium, arse-	
„ with Quinine ....	17, 284	nide of ....	4, 392
Antimonide of Bismuth ....	4, 439	„ -bases, organic ....	7, 188
„ Cobalt....	5, 353	„ Bromide ....	4, 364
„ Copper....	5, 474	„ Chlorides ....	4, 365
„ Copper and Po-		„ and Cyanogen, chlo-	
tassium ....	5, 476	ride of ....	8, 146
„ Copper and Lead	5, 487	„ and Potassium, chlo-	
„ Gold ....	6, 238	ride of ....	4, 381
„ Hydrogen, solid ?	4, 332	„ and Sodium, chloride	
„ Iron ....	5, 310	of ....	4, 387
„ Iron and Potas-		„ conjugated ethyl-	
sium ....	5, 312	compound contain-	
„ Lead ....	5, 174	ing ....	9, 79
„ Lead and Tin ....	5, 180	„ Croconate ....	10, 393
„ Nickel ....	5, 392	„ with Fluxes ....	4, 383
„ Palladium ....	6, 356	„ Fluorides ....	4, 371
„ Platinum ....	6, 333	„ Glass of ....	4, 360
„ Potassium ....	4, 374	„ Golden Sulphuret of	4, 354
„ Silver ....	6, 189	„ Grey Sulphide of ....	4, 337
„ Sodium ....	4, 382	„ and Hydrogen, com-	
„ Tin ....	5, 103	pounds of ....	4, 322
„ Zinc ....	5, 50	„ Iodide ....	4, 362
Antimonio-uranc Tartrate ....	10, 309	„ Iodide of, with Sul-	
Antimonious Acid ....	4, 329	phide of Antimony	4, 364
Antimonite of Ammonia ....	4, 372	„ Iodosulphide ....	4, 363
„ Baryta ....	4, 388	„ Liver of ....	4, 355, 378, 383
„ Cobalt-oxide ....	5, 353	„ Oxides ....	4, 323



Antimony: Oxychloride	....	4, 367	Antimony and Sodium, tartrate	10, 307
„ Oxyselelide	....	4, 362	„ and Strontium, tartrate	.... 10, 307
„ Oxysulphide	....	4, 359	„ and Strychnine, tartrate	.... 17, 504
„ Oxalate	....	13, 523	„ and Uranium, tartrate of	.... 10, 308
„ Pentachloride	....	4, 369	„ Salts, double, containing organic acids	.... 7, 210
„ Pentachloride, compound of, with Bichloride of Sulphur		4, 370	„ Selenide	.... 4, 362
„ Pentachloride, compound of, with Cyanide of Ethyl	....	13, 457	„ spots, and Arsenic spots, distinction between	.... 4, 269
„ Pentachloride, compound of, with Cyanide of Methyl	....	13, 412	„ Suboxide	.... 4, 323
„ Pentachloride, Hydrocyanate of	....	8, 149	„ Sulpharseniate	.... 4, 392
„ Pentachloride with Phosphuretted Hydrogen	....	4, 370	„ Sulphides	.... 4, 336
„ Pentachloride with Tersulphide of Antimony	....	4, 370	„ Copper, and Lead, sulphide of	.... 5, 487
„ Pentasulphide	....	4, 354	„ Sulpharsenite	.... 4, 392
„ Phosphide	....	4, 335	„ Sulphocacodylate	.... 9, 337
Antimony-salts	....	4, 327	„ Terbromide	.... 4, 364
„ Arseniate	....	4, 392	„ Terchloride	.... 4, 365
„ Arsenite	....	4, 392	„ „ action of, on glycol	.... 13, 424
„ Chromate	....	4, 390	„ Terchloride, action of oxalic acid on	.... 13, 515
„ Cinnamate	....	13, 276	„ Terchloride of, in combination with cumarin?	.... 13, 321
„ Molybdate	....	4, 390	„ Terchloride, solubility of, in alcohol	8, 270
„ Nitrate	....	4, 371	„ Terchloride of, with Sal-ammoniac	.... 4, 374
„ Oxalate	....	9, 148	„ Terfluoride	.... 4, 371
„ Phosphate	....	4, 336	„ Teriodide	.... 4, 362
„ Phosphite	....	4, 336	„ Teroxide	.... 4, 324
„ Pyrophosphate	....	4, 337	„ Teroxide, with Ammonia	.... 4, 371
„ Sulphate	....	4, 360	„ Teroxide, with Cuprous Oxide	.... 5, 474
„ Sulphite	....	4, 360	„ Teroxide, fused, electrolysis of	.... 1, 459
„ Tannate	....	15, 466	„ Teroxide, hydriodate of	.... 4, 363
„ Tartrate	....	10, 297	„ Teroxide, hydrobromate of	.... 4, 365
„ Vanadate	....	4, 390	„ Teroxide, hydrochlorate of	.... 4, 368
„ and Ammonium, tartrate	....	10, 298	„ Teroxide and Silica, hydrofluuate of	.... 4, 390
„ and Barium, tartrate	10, 307		„ Teroxide with Potash	.... 4, 375
„ and Berberine, tartrate	....	17, 196	„ Teroxide with Soda	4, 382
„ and Brucine, tartrate	17, 584		„ Tersulphide	.... 4, 354
„ and Calcium, tartrate	....	10, 308	„ Tersulphide, amorphous	.... 4, 340
„ and Cinchonine, tartrate	....	17, 218, 610	„ Tersulphide, crystallised	.... 4, 337
„ and Lead, tartrate	....	10, 313		
„ and Lithium, tartrate	....	10, 307		
„ and Potassium, racemate	....	10, 356		
„ and Potassium, tartrate	....	10, 299		
„ and Quinidine, tartrate	....	17, 302		

- Antimony, Tersulphide of, with  
Iodide of Antimony 4, 364  
„ Tersulphide of, with  
Pentachloride of  
Antimony .... 4, 370  
„ Tetrafluoride and  
Pentachloride .... 4, 371  
„ Tetrasulphide ? .... 4, 354  
Antitartaric Acid .... 10, 365  
Antitartrate of Ammonia .... 10, 367  
„ Ammonio-antimonic 10, 368  
„ of Brucine .... 17, 584  
„ Cinchonine .... 17, 217  
„ Lime .... 10, 368  
„ Potassio-antimonic 10, 368  
„ of Quinine .... 17, 291  
„ Soda and Ammo-  
nia .... 10, 367  
„ Soda and Potash 10, 367  
„ Strychnine .... 17, 503  
Ant-oil, fatty .... 17, 93  
Ants, Oil of .... 14, 358  
Antiphlogistic Theory .... 1, 5; 2, 35  
Antiputrescent substances .... 7, 100  
Antirracin .... 18, 215  
Antirrin .... 18, 215  
Antiseptics .... 7, 100  
Ants, oil of, artificial .... 10, 370  
„ preparation of formic acid  
from .... 7, 271  
Apatite.... .... 3, 219  
Apelaic Acid, *see* Azelaic Acid.  
Aphides, fats of .... 16, 398  
Aphrodæscin .... 18, 41  
Apiin .... 15, 341; 16, 94  
*Aplysia defilans*, colouring mat-  
ter of .... 18, 421  
Apocrenic acid .... 15, 158; 17, 469  
„ (Mulder's) .... 17, 473  
Apoglucic Acid.... .... 13, 365  
Apophyllates .... 13, 155  
Apophyllic Acid .... 13, 154  
Apophyllo-nitrate of Silver .... 13, 156  
Apophyllite .... 3, 393  
Aporetin .... 16, 176  
Aporicinic Acid, *see* Pyroricinic  
Acid.  
Apparatus for condensation of  
vapours .... 1, 288  
„ description of plate  
of .... 1, 13  
„ for measuring the  
circular polarisation  
of organic liquids.... 7, 65  
Appert's method of preserving  
meat, &c. .... 7, 100, 116  
Apples, preparation of malic  
acid from .... 10, 211  
„ diseased, ferment-oil of 14, 408  
Apple-tree, preparation of phlo-  
rizin from the root-bark of 16, 11  
„ wax from the root of .... 18, 161  
Apyrine .... 18, 187  
Apyrite.... .... 3, 454  
*Aqua phagadænica* .... 6, 9  
„ *regia* .... 2, 476  
Aqueous fusion of Salts .... 2, 64  
„ solutions .... 2, 65  
„ solutions, maximum  
density of .... 1, 225  
„ solutions, tables of  
boiling points of 1, 269, 278  
*Aquila mitigata, alba, caelestis*,  
or *mercurii* .... 6, 45  
Arabates .... 15, 202  
Arabians, chemical knowledge of 1, 3  
Arabic Acid .... 15, 194  
Arachamide .... 17, 372  
Arachidate of Amyl .... 17, 375  
„ Ethyl .... 17, 373  
„ Methyl .... 17, 373  
Arachidates, metallic .... 17, 371  
Arachidic Acid.... .... 17, 370  
Arachins .... 17, 373, 374  
*Arachis hypogæa*, oil of .... 16, 317  
*Arachnida*, phosphorescence of 1, 182  
Arbol-a-Brea resin .... 17, 397  
Arbutin .... 15, 342, 419  
*Arbutus Uva Ursi*, ursone in  
the leaves of .... 17, 361  
*Arcanum duplicatum* .... 3, 39  
*Arcanum Tartari* .... 8, 297  
Archil, effect of sunshine on the  
colour of .... 7, 95  
„ preparation of .... 12, 361  
*Araucaria brasiliensis*, resin of 18, 19  
Araucauric Acid .... 18, 20  
*Arctostaphylos Uva Ursi*, eri-  
colin in .... 16, 29  
*Arctostaphylos Uva Ursi*, resin  
from .... 15, 421  
Arcometer scales, relative values  
of .... 1, 10  
Arethase .... 9, 316  
Arfvedsonite .... 5, 280  
*Argemone mexicana*, oil from  
seeds of .... 17, 93  
Argene, Sulphide of .... 9, 394  
Argentammonium, Isatide of .... 13, 54  
Argentan .... 5, 497  
Argentate of Ammonia.... 6, 172  
„ Potash .... 6, 178  
Argentie Salts, *see* Silver Salts.  
Argentiferous Lead, cupellation  
of .... 6, 133  
„ Lead, treatment  
of, by fractional  
crystallisation :



<i>Pattinson's process</i> ....	6, 133	Arsenethylum ....	9, 70
Argentiferous Gold ....	6, 247	Arsenethyls ....	9, 69
Argento-benzo-naphthionamide ....	14, 507	Arsenate of Alumina ....	4, 310
„ -antimonic Tartrate ....	10, 326	„ Ammonia ....	4, 287
„ -bromate of Ammonia ....	6, 175	„ Antimonic Acid ....	4, 392
„ -chromate of Ammonia ....	6, 184	„ Antimonic oxide ....	4, 392
„ -chromic Oxalate ....	9, 169	„ Baryta ....	4, 300
„ -chromic Tartrate ....	10, 326	„ Bismuth-oxide ....	4, 449
Argentocyanide of Cadmium ....	8, 31	„ Casein ....	18, 314
„ Calcium ....	8, 31	„ Cerium ....	4, 308
„ Cobalt ....	8, 32	„ Chromic oxide ....	4, 312
„ Copper ? ....	8, 33	„ Cinchonine ....	17, 211
„ Iron ....	8, 31	„ Cobalt-oxide ....	5, 349
„ Lead ....	8, 31	„ Cupric oxide ....	5, 471
„ Manganese ....	8, 31	„ Ferric oxide ....	5, 307
„ Mercury ....	8, 33	„ Ferric oxide and	
„ Nickel ....	8, 33	„ Lime ....	5, 309
„ Potassium ....	8, 29	„ Ferroso-ferric oxide ....	5, 306
„ Zinc ....	8, 31	„ Ferrous oxide ....	5, 305
Argento-hyposulphate of Ammonia ....	6, 174	„ Glucina ....	4, 310
„ -naphthionamide ....	14, 507	„ Iridic oxide ....	6, 391
„ -nitrate of Ammonia ....	6, 177	„ Lead-oxide ....	5, 173
„ -nitrite of Ammonia ....	6, 176	„ Lead-oxide with	
„ -perchlorate of Ammonia ....	6, 176	„ chloride of Lead ....	5, 174
„ -prussic Acid ....	8, 28	„ Lime and Ammonia ....	4, 306
„ -seleniate of Ammonia ....	6, 175	„ Lime and Magnesia ....	4, 308
„ -sulphate of Ammonia ....	6, 174	„ Magnesia ....	4, 307
Argentous Citrate ....	11, 461	„ Magnesia and Ammonia ....	4, 307
<i>Argentum</i> ....	6, 132	„ Manganous oxide ....	4, 314
<i>Argentum vivum</i> ....	6, 1	„ Manganous oxide	
Argol ....	10, 276	„ and Ammonia ....	4, 315
Argyræscetin ....	18, 34	„ Mercurous oxide ....	6, 117
Argyræscin ....	18, 38	„ Molybdic acid ....	4, 311
<i>Argyritis</i> ....	5, 109	„ Molybdic oxide ....	4, 311
Aribine ....	17, 561	„ Molybdous oxide ....	4, 311
Aricine ....	17, 568	„ Nickel-oxide ....	5, 390
<i>Aristolochia Clematitis</i> , bitter		„ Palladious oxide ....	6, 356
principle of ....	18, 215	„ Platinic oxide ....	6, 332
<i>Aristolochia Clematitis</i> , volatile		„ Potash ....	4, 291
oil of ....	14, 532	„ Potash, Electrolysis	
„ resin ....	18, 216	„ of ....	1, 462
„ wax ....	18, 158	„ Iodide of Potassium ....	4, 294
„ yellow ....	18, 216	„ Quinine ....	17, 284, 616
Aristotle, his ideas on the		„ Rhodic oxide ? ....	6, 367
nature of matter ....	1, 3	„ Silica ? ....	4, 311
<i>Arnica montana</i> , soft resin of ....	17, 447	„ Silver-oxide ....	6, 186
Arnica oil ....	14, 358	„ Soda ....	4, 295
„ -root, resins of ....	17, 363	„ Soda and Ammonia ....	4, 298
„ -wax ....	18, 158	„ Soda and Potash ....	4, 299
„ -yellow ....	17, 364	„ Stannic oxide ? ....	5, 102
Arnicin ....	15, 342; 17, 361	„ Stannous oxide ? ....	5, 102
Arnold de Villa Nova ....	1, 3	„ Strontia ....	4, 302
Arquerite ....	6, 199	„ Strychnine ....	17, 496
Arragonite ....	3, 186	„ Thorina ....	4, 310
Arrow-poison of Guiana ....	17, 592	„ Titanic oxide ....	4, 311
Arrow-root ....	15, 77	„ Uranic oxide ....	4, 313
Arsenbiethyl ....	9, 72	„ Uranic oxide and	
		„ Soda ....	4, 313

- |                                                         |             |                                                           |         |
|---------------------------------------------------------|-------------|-----------------------------------------------------------|---------|
| Arseniate of Uranous oxide ....                         | 4, 313      | Arsenic, in common sulphuric acid ....                    | 2, 183  |
| "    Vanadic acid ....                                  | 4, 312      | Arsenical Amalgam ....                                    | 6, 116  |
| "    Vanadic oxide ....                                 | 4, 312      | Arsenical Iron ....                                       | 5, 304  |
| "    Yttria ....                                        | 4, 309      | "    Phosphorus ....                                      | 1, 194  |
| "    Zinc-oxide ....                                    | 5, 49       | "    Pyrites ....                                         | 5, 304  |
| "    Zinc - oxide with Ammonia ....                     | 5, 50       | "    Sal-ammoniac ....                                    | 4, 287  |
| "    Zirconia ....                                      | 4, 310      | "    Silver-blende ....                                   | 6, 188  |
| Arseniates ....                                         | 4, 262      | Arsenide of Aluminium ....                                | 4, 310  |
| "    reaction of, with Tannic Acid ....                 | 15, 466     | "    Antimony and Potassium ....                          | 4, 392  |
| Arsenic ....                                            | 4, 248      | "    Bismuth ....                                         | 4, 449  |
| "    Acid ....                                          | 4, 262      | "    Cobalt ....                                          | 5, 348  |
| "    Acid, action of, on alcohol ....                   | 18, 243     | "    Cobalt with Sulphide of Cobalt ....                  | 5, 351  |
| "    Acid and Potash, tartrate of ....                  | 10, 296     | "    Copper ....                                          | 5, 470  |
| "    allotropic state of ....                           | 4, 251      | "    Glucinum ....                                        | 4, 310  |
| "    Alloys ....                                        | 4, 316      | "    Gold ....                                            | 6, 238  |
| "    Ammonio-chloride ....                              | 4, 289      | "    Hydrogen, solid ....                                 | 4, 264  |
| "    Ammonio-fluoride ....                              | 4, 290      | "    Iron ....                                            | 5, 303  |
| "    Ammonio-pentasulphide ....                         | 4, 289      | "    Lead ....                                            | 5, 172  |
| "    Ammonio-tersulphide ....                           | 4, 288      | "    Lead and Potassium ....                              | 5, 174  |
| "    Bromide ....                                       | 4, 283      | "    Manganese ....                                       | 4, 314  |
| "    in cast-iron ....                                  | 5, 215      | "    Nickel ....                                          | 5, 388  |
| "    Chlorides ....                                     | 4, 205      | "    Palladium....                                        | 6, 356  |
| "    Chlorides, solution of, in volatile oils ....      | 7, 168      | "    Platinum ....                                        | 6, 332  |
| "    compounds, solubility of in alcohol ....           | 8, 270      | "    Potassium ....                                       | 4, 290  |
| "    detection of, in sulphur ....                      | 2, 156      | "    Propyl ....                                          | 9, 413  |
| "    Ether ....                                         | 8, 171      | "    Rhodium ....                                         | 6, 367  |
| "    Ethyl-bases containing ....                        | 13, 492     | "    Silver ....                                          | 6, 186  |
| "    Fluoride ....                                      | 4, 286      | "    Sodium ....                                          | 4, 294  |
| "    Hydriodate of Teriodide ....                       | 4, 283      | "    Tin ....                                             | 5, 102  |
| "    and Hydrogen, compound of ....                     | 4, 264      | "    Zinc ....                                            | 5, 49   |
| "    Iodides ....                                       | 4, 281      | Arsenides, metallic, reduction of silver chloride by .... | 6, 428  |
| "    Marsh's test for ....                              | 4, 268      | Arsenosiderite ....                                       | 5, 309  |
| "    Methyl-bases containing ....                       | 13, 492     | Arsenio-sulphate of Ferric oxide ....                     | 5, 308  |
| "    Octodeca-sulphide ....                             | 4, 279      | Arsenious Acid....                                        | 4, 253  |
| "    Oxides....                                         | 4, 252      | "    aqueous solution ....                                | 4, 257  |
| "    Persulphide ....                                   | 4, 280      | "    compounds of, with other acids ....                  | 4, 259  |
| "    Phosphide ....                                     | 4, 271      | "    Hydrosulphate of ....                                | 4, 274  |
| "    in commercial phosphorus ....                      | 2, 104      | "    Oxalate of? ....                                     | 9, 147  |
| "    ruby ....                                          | 4, 271      | "    Phosphate of ....                                    | 4, 271  |
| "    Selenide ....                                      | 4, 280      | "    reaction of, with albumin ....                       | 18, 296 |
| "    spots and Antimony spots, distinction between .... | 4, 269      | "    Sulphate of ....                                     | 4, 280  |
| "    Sub-oxide ....                                     | 4, 252      | "    Tartrate of? ..                                      | 10, 296 |
| "    Sub-sulphide ....                                  | 4, 271      | "    Terhydrochlorate of ....                             | 4, 285  |
| "    Sulphide ....                                      | 4, 277      | "    and Ammonia, racemate of ....                        | 10, 355 |
| "    and Sulphur, chloride of ....                      | 4, 285      | "    and Ammonia, Tartrate of ....                        | 10, 296 |
| "    Terchloride, expansion of by heat ....             | 1, 226, 229 | "    and Potash, oxalate of ....                          | 13, 521 |
| "    Terchloride of, with Bichloride of Tin ....        | 5, 103      | "    and Potash, racemate of ....                         | 10, 356 |
|                                                         |             | "    and Potash, tartrate of ....                         | 10, 296 |



Arsenious Acid and Soda, race-				Asarum Oil ....	14, 359
mate of ....	10, 356			Asbestos of Koruk ....	3, 397
„ „ and Soda, tar-				„ ordinary ....	3, 407
trate of ....	10, 296			„ variegated ....	3, 395
„ Bromide ....	4, 283			Asbolin....	15, 159
„ Chloride ....	4, 285			Asclepione ....	17, 368
„ Fluoride ....	4, 286			Ash of organic compounds ....	7, 85
„ Iodide ....	4, 281			Ash-tree Bark, preparation of	
„ Oxide ....	4, 253			Fraxin from ....	16, 280
„ Sulphide ....	4, 273			Asparagine ....	10, 239
Arseniovinic Acid ? ....	8, 481			„ with Cadmic oxide....	10, 247
Arsenites of Ammonia ....	4, 287			„ Cupric oxide ....	10, 247
Arsenite of Antimonic Oxide ....	4, 392			„ Hydrate ....	10, 244
„ Baryta ....	4, 300			„ Hydrochlorate ....	10, 245
„ Bromide of Arsenic	4, 284			„ with Lead-oxide ....	10, 247
„ Cobalt-oxide ....	5, 349			„ „ Lime ....	10, 246
„ Cupric oxide ....	5, 470			„ „ Mercuric chlo-	
„ Ferric oxide ....	5, 304			ride ....	10, 248
„ Ferrous oxide ....	5, 304			„ „ Mercuric oxide	10, 248
„ Lead-oxide ....	5, 173			„ Nitrate ....	10, 246
„ Lime ....	4, 302			„ with Nitrate of Silver	10, 248
„ Magnesia ....	4, 307			„ „ Potash ....	10, 246
„ Mercuric oxide ....	6, 116			„ „ Silver-oxide ....	10, 248
„ Mercurous oxide ....	6, 116			„ Oxalate ....	10, 240, 249
„ Nickel-oxide ....	5, 390			„ Sulphate ....	10, 245
„ Potash ....	4, 291			„ with Zinc-oxide ....	10, 247
„ Silver-oxide ....	6, 186			Aspartates ....	10, 233
„ Soda ....	4, 295			Aspen, existence of populin in	
„ Strontia ....	4, 302			the leaves and root of the	15, 441
„ Strychnine ....	17, 495			Aspertannic Acid ....	15, 512
„ Teriodide of Arsenic	4, 282			<i>Asperula odorata</i> , preparation	
Arsenites ....	4, 259			of benzoic acid from	
„ reaction of, with				the haulm of ....	12, 35
tannic acid ....	15, 466			„ <i>odorata</i> , preparation	
Arseniuretted Hydrogen ....	4, 264			of coumarin from	13, 322
Arsenmethyl ....	13, 495			„ <i>odorata</i> , rubichloric	
Arsenmethylic Acid ....	13, 496			acid in ....	16, 66
Arsenmethylethylum ....	9, 352			„ <i>odorata</i> , tannic acid	
Arsenmonomethyl ....	13, 495			from ....	15, 512
Arsentriethyl ....	9, 73			Asphalt....	17, 433
Arsentrimethyl....	9, 351			<i>Aspidium Filix mas</i> , fatty oil	
Arsidogen ....	9, 315			from the roots of....	17, 93
<i>Artemisia Absynthium</i> , bitter				„ <i>Filix mas</i> , filixoleic	
principle of ....	17, 354			acid in the roots of	17, 74
<i>Artemisia Dracunculus</i> , volatile				„ <i>Filix mas</i> , tannic	
oil of ....	14, 192			acids from ....	15, 496
Arthanitin, <i>see</i> Cyclamin.				Assamar, Reichenbach's	15, 248
Artichokes, green colouring mat-				„ Völckel's ....	15, 350
ter of ....	17, 7			<i>Aster glutinosus</i> , soft resin of	
Artificial bitter of Aloes ....	12, 1			the buds of ....	17, 447
Artificial Felspar ....	3, 442			<i>Asterias noctiluca</i> , phospho-	
Arvic Acid ....	17, 474			rescence of ....	1, 185
<i>Asa dulcis</i> , <i>see</i> Benzoin.				Astringents, estimation of tannic	
Asafoetida ....	17, 398			acid in ....	15, 456
„ preparation of Styph-				Aspartate of Cinchonine	17, 216
nic acid from ....	11, 229			„ Morphine ....	16, 435
„ volatile oil of ....	17, 399			„ Quinine ....	17, 290
Asarabaca-camphor ....	17, 357			Aspartates, Metallic ....	10, 234—238
Asarone ....	17, 357			Aspartic Acid ....	10, 230

- Asparagus, preparation of Asparagine from .... 10, 241
- Asparamide .... 10, 240
- Atakamite .... 5, 441
- Athamantin .... 12, 101
- „ compound obtained from hydrochlorate of.... 12, 98
- „ Hydrochlorate .... 12, 103
- Atherospermatannic Acid .... 15, 514
- Atherospermine .... 18, 187
- Atmosphere terrestrial, how constituted .... 1, 259
- Atmospheric Air .... 2, 402
- „ pressure .... 1, 260
- Atomic number, circumstances which modify the .... 1, 56
- „ number, definition of .... 1, 52
- „ number of a compound, Gmelin's method of determining .... 1, 76
- „ number of a compound, Schröder's method of determining .... 1, 75
- „ number, the reciprocal of the atomic volume .... 1, 58
- „ numbers of compound gases .... 1, 66
- „ numbers of elementary gases .... 1, 53
- „ numbers of solids and liquids .... 1, 68
- „ theory, ancient .... 1, 146
- „ theory, modern .... 1, 146
- „ theory, Wollaston's argument for the correctness of .... 1, 148
- „ volume .... 1, 57
- „ volume, and specific gravity, Playfair and Joule's researches on .... 1, 83
- „ weight .... 1, 42
- „ weights, causes of difference in determination of .... 1, 45
- „ weights of compounds .... 1, 59, 66, 68—72
- „ weights of the elements .... 1, 43—52
- „ weights of the elements, table of .... 1, 50
- „ weights, Gerhardt's .... 7, 28
- „ weights of metals in relation to their specific gravities .... 1, 84
- „ weights, principles useful in determining .... 1, 47
- „ weights, relation between oxygen and hydrogen, scales of .... 1, 44
- „ weights, relations of, to volumes .... 1, 84—86
- Atomic weights and densities, Filhol's calculations of relations between .... 1, 79
- „ weights and densities, tables illustrating the relations between .... 1, 68—72; 84, 85
- „ weights and densities of simple substances, relations between .... 1, 52—59
- Atoms, compound .... 1, 42, 147
- „ of compounds, heat-capacity of .... 1, 248
- „ constitution of .... 1, 146
- „ elementary, capacity for heat of .... 1, 243
- „ elementary, relative position of, in compound organic atoms.... 7, 20
- „ even numbers of elementary, in organic compounds .... 7, 6
- „ forms of .... 1, 146
- „ hypothesis of .... 1, 42, 145
- „ surrounded by spheres of heat .... 1, 147
- Atropa Belladonna*, oil from the seed of .... 16, 314
- Atropa Belladonna*, colouring matter of the roots of .... 17, 1
- Atropic Acid .... 16, 458
- Atropine .... 16, 448
- „ Salts .... 16, 454—456
- Atrosin .... 17, 1
- Attraction, adhesive .... 1, 20
- „ of aggregation .... 1, 6
- „ chemical .... 1, 33
- „ cohesive .... 1, 6
- „ of crystallisation .... 1, 8
- „ of gravitation .... 1, 1
- „ elective .... 1, 33
- Atherosperma Moschatum*, resin of the bark of .... 17, 447
- Augite .... 3, 402
- Augite, conchoidal .... 3, 429
- Aurade or Auradine, *see* Nerolicamphor.
- Aurate of Ammonia .... 6, 222
- „ Baryta .... 6, 233
- „ Lime with Chloride of Calcium .... 6, 234
- „ Magnesia .... 6, 234
- „ Potash .... 6, 226
- „ Potash with Chloride of Potassium .... 6, 230
- „ Soda with Chloride of Sodium .... 6, 233
- „ Strontia with Chloride of Strontium .... 6, 234



<i>Aurelia</i> , phosphorescence of ....	1, 186	Aurous Iodide ....	6, 211
Auric Acetate ....	8, 334	„ Oxide ....	6, 205
„ Acid ....	6, 207	„ Sulphide ....	6, 210
„ Chloride ....	6, 215	„ Stannate? ....	6, 239
„ Cyanide? ....	8, 36	<i>Aurum mosaicum</i> , or <i>musivum</i> ....	5, 79
„ Iodate ....	6, 214	Aventurine-glass ....	3, 381
„ Iodide ....	6, 213	Avenin ....	18, 437
„ Molybdate ....	6, 237	Avornin ....	18, 217
„ Nitrate ....	6, 222	Axes of crystals ...	1, 15
„ Oxide ....	6, 207	„ magne-crystallic and mag-	
„ Oxide, hydrated....	6, 209	neto-crystallic ....	1, 518, 519
„ Persulphomolybdate ....	6, 237	Axin, or Age ....	17, 47
„ Salts ....	6, 209	Axinic Acid ....	16, 317, 17, 46
„ Sulpharseniate ....	6, 238	Axinite ....	3, 453
„ Sulpharsenite ....	6, 238	<i>Azadirachta indica</i> , oil of the	
„ Sulphate ....	6, 211	Almonds of ....	17, 94
„ Sulphide ....	6, 210	Azaniline ...	11, 293
„ Sulphomolybdate ....	6, 237	Azelaates, metallic ....	17, 81
„ Sulphotellurite ....	6, 238	Azelaic Acid ....	17, 79
„ Sulphotungstate ....	6, 237	Azerythrin ....	12, 359
Aurichalcite ....	5, 480	Azoanisyl, Nitride of ....	13, 145
Aurico-sodic Hyposulphite ....	6, 232	Azobenzene, Azobenzide or Azo-	
Auridecyanide of Ammonium ....	8, 38	benzol ....	11, 337
„ Silver ....	8, 42	Azobenzile ....	12, 220
„ Potassium ....	8, 41	Azobenzoïde ....	12, 211
Auriferous Silver ....	6, 247	Azobenzoïdin ....	12, 211
„ Telluride of Silver....	6, 250	Azobenzoïlide ....	12, 205
Auripigment ....	4, 273	Azobenzoyl, Hydride of ....	12, 191
Aurite of Potash ....	6, 226	„ ....	12, 208
„ Ammonia ....	6, 222	„ Hydrosulphate ....	12, 215
Aurocyanide of Ammonium ....	8, 37	Azolitimin? ....	12, 364
„ Iron ....	8, 42	Azonaphthylamine, <i>see</i> Semi-	
„ Lead ....	8, 42	naphthylamine.	
„ Manganese ....	8, 42	Azo-nuclei ....	7, 170
„ Potassium ....	8, 38	„ Aldehydes of ....	7, 195
„ Silver ....	8, 42	Azophenylamine ....	11, 293
„ Tin ....	8, 42	Azophosphate, Cupric ....	5, 456
„ Zinc ....	8, 42	„ Ferric ....	5, 259
Auroso-barytic Hyposulphite ....	6, 233	„ Plumbic ....	5, 158
Auroso-sodic Hyposulphite ....	6, 231	Azote ....	2, 370
„ Sulphite ....	6, 232	Azoxybenzene ....	11, 341
Aurosulphide of Potassium ....	6, 227	Azulmic Acid ....	11, 375
„ Sodium ....	6, 230	„ (Braconnot's) ....	17, 476
„ Potash ....	6, 227	Azulmine ....	11, 375
Aurous Chloride ....	6, 215	Azure Copper ore ....	5, 415
„ Cyanide ....	8, 34		

## B.

Badger-fat ....	16, 385	Balsam of Peru ....	17, 389
<i>Balæna mysticetus</i> , oil from the		„ Tolu ....	17, 392
blubber of ....	16, 321	<i>Balsamea Canadensis</i> , turpen-	
„ <i>rostrata</i> , train oil from	17, 180	tine from ....	18, 18
Balanophora Wax ....	18, 158	<i>Balsamodendron</i> , Bdellium resin	
Baldwin's Phosphorus ....	1, 194	obtained from various species	
Balm oil ....	14, 359	of ....	17, 402
<i>Balneum Maris</i> v. <i>Mariæ</i> ....	1, 275	<i>Balsamodendron Myrrha</i> , resin	
Balsam of Copaiba ....	17, 327	of ....	17, 425
„ Mecca ....	17, 393	Banca Tin ....	5, 67

Bar Iron	....	5, 205	Barium Sulphides	....	3, 146
Bar Steel	....	5, 206	„ Sulphide of, with Fluoride of Calcium	....	3, 218
Barberry-root, preparation of berberine from the bark of	....	17, 186	„ Sulphide of, with Mustard-oil	....	10, 49
„ preparation of oxyacanthine from	....	17, 197	„ Sulphocyanide....	....	8, 84
Baregin....	....	18, 457	„ Sulphocyanide of, with Cyanide of Mercury	....	8, 96
Barilla	....	3, 78	„ Sulphostannate	....	5, 99
Barium....	....	3, 133	„ Sulphotungstate	....	4, 43
„ Alloys....	....	3, 166	„ Sulphovanadate	....	4, 101
„ Amalgam	....	6, 105	„ Thiocyanide	....	8, 114
„ Bromide	....	3, 156	„ and Carbon, Sulphide....	3, 153	
„ Bromide of, with Cyanide of Mercury	8, 22, 19		„ and Copper, Salicylate	12, 254	
„ Bromo-aurate....	6, 233		„ „ Sulphide	5, 463	
„ Bromopalladite	6, 355		„ „ Sulpho-camphorate	13, 380	
„ Chloride	3, 157		„ and Ethyl, Phosphites	9, 360	
„ Chloride of, with Aurate of Baryta	6, 234		„ and Hydrogen, Sulphide	3, 149	
„ Chloride of, with Cyanide of Mercury	8, 22, 19		„ and Iron, Alloy	5, 273	
„ Chloride of, with Fluoride of Calcium and Sulphate of Baryta....	3, 219		„ „ Sulphide	5, 273	
„ Chloro-aurate	6, 233		„ and Mercury, Bromide	6, 106	
„ Chloropalladite	6, 355		„ „ Chloride	6, 106	
„ Chloroplatinate	6, 327		„ „ Iodide	6, 106	
„ Chlorostannite	5, 99		„ „ Sulphide	6, 105	
„ Cobaltidecyanide	7, 495		„ and Palladium, Alloy	6, 355	
„ and Copper, alloy of ?	5, 462		„ and Platinum, Alloy	6, 327	
„ Cuprocyanide....	8, 7		„ and Potassium, Ferri-cyanide	7, 481	
„ Cyanide	7, 417, 12, 495		„ and Potassium, Ferro-cyanide	7, 481	
„ Ferrocyanide	7, 480		„ and Potassium, Sulphide	3, 164	
„ Fluoride	3, 161		„ and Ruthenium, Sesquichloride	6, 404	
„ Hydrosulphocyanide	8, 101		„ and Silicium, Fluoride	3, 387	
„ Hyposulpharsenite	4, 301		„ and Silver, Alloy	6, 181	
„ Iodide	3, 154		„ „ Chloride	6, 181	
„ Iodide of, with Cyanide of Mercury....	8, 22		„ and Zinc, Cyanide	7, 425	
„ Iodo-aurate	6, 233		„ „ Iodide	5, 45	
„ Iodo-platinate	6, 327		Bark of trees, formation of humus in	17, 459	
„ Iodostannite	5, 99		Barley-malt, preparation of dextrin from	15, 187	
„ Mellonide	9, 393		Barley-meal, oil of	17, 94	
„ -compound of Milk-sugar	15, 226		Barometer scale in millimetres and inches, table of	2, 499	
„ Nitro-prusside	8, 132		Baros-camphor	15, 332	
„ Peroxide	3, 138		Barsowite	3, 434	
„ Phosphide	3, 141		Baryta	3, 134	
„ Platinocyanide	8, 52; 10, 508		„ Acetate	8, 301	
„ Platino-platinidcyanide	8, 52		„ Acetate	13, 475	
„ Salts, solubility of, in alcohol	8, 266		„ Acetonate	13, 443	
„ Selenide	3, 153		„ Acetonitrate	11, 406	
„ Selenocyanide....	8, 123		„ Aconitates	9, 371	
„ Sulphantimoniate	4, 388		„ Acrylate	18, 306	
„ Sulphantimonite	4, 388		„ Albuminate	13, 422	
„ Sulpharseniate	4, 301		„ Alloxanate	10, 163	
„ Sulpharsenite	4, 301		„ Aloetate	12, 11	
			„ Althionate	8, 432	



Baryta, Aluminate ....	3, 327	Baryta, Croconate ....	10, 394
„ Amidobenzoate ....	12, 146	„ crystallised ....	3, 136
„ Amilate ....	15, 100	„ Cuminatè ....	14, 150
„ Amylophosphate ....	11, 51	„ Cyanate ....	8, 67
„ Amylosulphate ....	11, 57	„ Cyanurate ....	9, 453
„ Amylosulphite....	11, 53	„ Damalurate ....	12, 437
„ Amylotartrate ....	11, 82	„ Elaidate ....	17, 77
„ Anchoate ....	13, 375	„ Ellagate ....	16, 188
„ Anisate ....	13, 126, 584	„ Ethionate ....	8, 434
„ Antimoniate ....	4, 388	„ Ethylomeconate ....	12, 431
„ Antimonite ....	4, 388	„ Ethylophosphate ....	8, 400
„ Arabate ....	15, 202	„ Ethylosulphite ....	8, 409
„ Arachidate ....	17, 371	„ Ethylotrithionate ....	12, 514
„ Arseniate ....	4, 300	„ Euchroate ....	10, 20
„ Arsenite ....	4, 300	„ Eugenate ....	14, 205
„ Arsenmethyrate ....	13, 497	„ Evernate ....	16, 444
„ Aspartate ....	10, 235	„ Ferrate ....	5, 273
„ Aurate....	6, 233	„ with Fluxes ....	3, 164
„ Aurate of, with Chloride		„ Formiate ....	7, 277
of Barium ....	6, 234	„ Fulminurate ....	10, 560
„ Azelaate ....	17, 81	„ Fumarate ....	10, 26
„ Benate ....	17, 559	„ Gallate ....	12, 406
„ Benzoate ....	12, 59	„ -compounds of Glucose	15, 327
„ Benzoglycolate ....	12, 66	„ Glycocholate ....	18, 60
„ Biethylmeconate ....	12, 434	„ Glycolate ....	12, 509 ; 13, 437
„ Bimethylophosphate ....	12, 483	„ Glyoxylate ....	13, 435
„ Binitroethylate ....	12, 557	„ -harmotome ....	3, 446
„ Binitrosalicylate ....	12, 316	„ Hippurate ....	12, 76
„ Bisulphite with Glyoxal	12, 505	„ Hydrate ....	3, 135
„ Borates ....	3, 140	„ Hydrate, electrolysis of	1, 458
„ Bromacetate ....	12, 533	„ Hydrochlorate and Stan-	
„ Bromate ....	3, 156	nite of ....	5, 99
„ Bromoplatinate ....	6, 327	„ Hydropiperate ....	15, 12
„ Butyrate ....	10, 555	„ Hydroselenite ....	3, 153
„ Butyrate ....	10, 85	„ Hyoglycocholate ....	18, 104
„ Camphorate ....	14, 459	„ Hypobromite ....	3, 156
„ Caprate ....	14, 847	„ Hypochlorite ....	3, 160
„ Caproate ....	11, 417	„ Hypophosphite ....	3, 141
„ Caprylate ....	13, 192	„ Hyposulphate ....	3, 151
„ Carbobenzoate....	12, 47	„ Hyposulphite ....	3, 150
„ Carbolate ....	11, 152	„ Iodate ....	3, 154
„ Carbonates ....	3, 138	„ Isamate ....	13, 110
„ Chelidonate ....	12, 417	„ Isethionate ....	8, 430
„ Chenocholate ....	18, 130	„ Itaconate ....	10, 426
„ Chlorate ....	3, 160	„ Kinate ....	16, 228
„ Chlorite ....	3, 160	„ Lactate ....	11, 481
„ Chlorobenzoate ....	12, 114	„ Laurate ....	15, 47
„ Chlorostannate ....	5, 99	„ Lecanorate ....	12, 379
„ Cholate ....	18, 50	„ Leucate ....	15, 60
„ Choloidate ....	18, 55	„ Maleates ....	8, 155
„ Chromate ....	4, 153	„ Malate ....	10, 215
„ Chrysammate ....	12, 4	„ Malonate ....	13, 561
„ Chrysophanate ....	16, 175	„ Mandelate ....	12, 59
„ Cimicate ....	16, 285	„ Manganate ....	4, 241
„ Cinnamate ....	13, 275	„ Mannitate ....	15, 383
„ Citraconate ....	10, 420	„ Margarate ....	16, 473
„ Citrates ....	11, 448—449	„ Meconate ....	12, 427
„ Comenamate ....	11, 394	„ Mellitate ....	10, 6
„ Comenatè ....	11, 385	„ Mesaconate ....	10, 429

Baryta, Methionate ....	8, 435	Baryta, Stearate ....	17, 110
„ Methylsalicylate ....	12, 257	„ Styphnate ....	11, 232
„ Molybdate ....	4, 75	„ Suberate ....	13, 209
„ Monoarsenite ....	4, 300	„ Succinate ....	10, 119
„ Monochloracetate ....	12, 539	„ Sucrates ....	15, 284
„ Mucate ....	11, 506	„ Sulphacetate ....	8, 437
„ Myristate ....	16, 212	„ Sulphanilate ....	11, 298
„ Naphthionate ....	14, 113	„ Sulphate ....	3, 151
„ Niccolate ....	5, 386	„ Sulphate of, with Chloride of Barium and Fluoride of Calcium ....	3, 219
„ Nitrate ....	3, 163	„ Sulphate of, with Iridic Oxide ....	6, 391
„ Nitrite.... ....	3, 162	„ Sulphetherate ....	10, 519
„ Nitrobenzoate ....	12, 124	„ Sulphindigotate ....	13, 63
„ Nitrosalicylite....	12, 305	„ Sulphite ....	3, 150
„ Cenanthylate ....	12, 453	„ Sulphobenzoate ....	12, 54
„ Oleate.... ....	17, 71	„ Sulphobenzolate ....	11, 156
„ Opianate ....	14, 429	„ Sulphocaprylate ....	13, 197
„ Osmiamate ....	6, 420	„ Sulphometholate ....	7, 299, 306
„ Oxalate ....	9, 128; 13, 516	„ Sulphosinapate ....	10, 35
„ Oxamate ....	13, 536	„ Sulphovinate ....	8, 422
„ Palmitate ....	16, 362	„ Sulphuret ....	3, 146
„ Pelargonate ....	13, 370	„ Sylvate ....	17, 320
„ Pentathionate....	3, 150	„ Tannate ....	15, 465
„ Perchlorate ....	3, 161	„ Tantalate ....	4, 11
„ Periodate ....	3, 155	„ Tartrate ....	10, 285
„ Permanganate....	4, 241	„ Tartrelate ....	10, 335
„ Phloretate ....	13, 310	„ Tartrovinat ....	10, 342
„ Phosphates ....	3, 144	„ Taurocholate ....	18, 68
„ Phosphites ....	3, 143	„ Thiacetate ....	13, 449
„ Phosphuret ....	3, 139	„ Toluylate ....	13, 9
„ Phthalate ....	13, 13	„ Trithionate ....	3, 150
„ Picrate ....	11, 211	„ Tungstate ....	4, 43
„ Pimelate ....	12, 465	„ Uranate ....	4, 190
„ Piperate ....	14, 10	„ Urate ....	10, 473
„ Platinat ....	6, 327	„ Uroxanate ....	10, 479
„ Plumbite ....	5, 163	„ Valerate ....	11, 32
„ Propionate ....	9, 405; 10, 554	„ Vanadiates ....	4, 101
„ Purpurate ....	10, 198	„ Vulpate ....	17, 150
„ Pyromeconate ....	10, 441	„ Xanthate ....	8, 456
„ Pyromucate ....	10, 385	Baryta and Alumina, oxalate of ....	9, 305
„ Pyrotartrate ....	11, 90	„ and Ammonia, carbonate of ....	3, 163
„ Racemate ....	10, 352	„ and Aurous oxide, hyposulphite of ....	6, 233
„ Racemomethylate ....	10, 363	„ and Lime, butyrate of ....	10, 86
„ Racemovinate ....	10, 364	„ and Lime, carbonate of ....	3, 218
„ Ricinelaïdate ....	17, 136	„ and Lime, compound of ....	3, 218
„ Ricinoleate ....	17, 133	„ and Lime, sulphate of ....	3, 218
„ Roccellate ....	16, 476	„ with Magnesia? ....	3, 253
„ Saccharates ....	11, 518	„ and Mercuric oxide, hyposulphite of ....	6, 106
„ Salicylamate ....	12, 322	„ and Platinic oxide, sulphate of ....	6, 327
„ Salicylate ....	12, 251	„ and Potash, carbonate of ....	3, 164
„ Salicylite ....	12, 242	„ and Potash, nitrate of....	3, 164
„ Salicylurate ....	12, 332		
„ -salt, acid of Faraday's smouldering ....	14, 20		
„ Seleniate ....	3, 154		
„ Selenite ....	3, 153		
„ Silicate ....	3, 387		
„ Silicate of, with Silicate of Alumina ....	3, 420		
„ Stannate ....	5, 99		



Baryta and Potash, silicate of ...	3, 388	Beech-wood Vinegar, preparation	
„ and Potash, tartrate of ...	10, 286	of carbolic acid from ...	11, 139
„ and Silver-oxide, nitrite		Beef-fat, <i>see</i> Ox-fat.	
of ... ..	6, 181	Beef-marrow, medullie acid in...	17, 540
„ and Soda, metaphosphate		Beer, detection of strychnine in	17, 483
of ... ..	3, 165	Beer-vinegar ... ..	8, 284
„ and Soda, pyrophosphate		Beer-yeast ... ..	18, 459
of ... ..	3, 164	Bee's-wax ... ..	18, 154
„ -water ... ..	3, 136	„ preparation of Cerotic	
Barytes... ..	3, 134	acid from ... ..	18, 135
Baryto-calcite ... ..	3, 218	Beet, cane-sugar in ... ..	15, 240
„ -chromic Oxalate ... ..	9, 142	„ colouring matter of ... ..	16, 531
„ -ferric Oxalate ... ..	9, 160	„ preparation of Cane-sugar	
Basanomelane ... ..	5, 291	from ... ..	15, 242
Bases, development of electricity		„ -juice, preparation of Lactic	
by combination of, with		acid from ... ..	11, 477
acids ... ..	1, 321	Behen-oil ... ..	16, 386
„ development of electricity		Belladonna, preparation of As-	
by combination of, with		paragine from ... ..	10, 242
one another, with water		Bell-metal, &c. ....	5, 482
and with salts ... ..	1, 332	„ British ... ..	5, 488
„ hydrated ... ..	2, 63	Benate of Ethyl ... ..	17, 560
„ organic, <i>see</i> Alkaloids.		Benates, Metallic ... ..	17, 559
„ and Acids, heat developed		Benic acid ... ..	17, 558
in the combination of ...	1, 296	Benic acids (Walter's) ...	16, 365
Basicity of Organic Acids ...	7, 197	Benzacetosulphophenamide	12, 159
Bases volatile, from coal-tar oil	15, 156	Benzaldide? ... ..	12, 18
Basil-camphor ... ..	14, 359	Benzamate of Methyl ...	12, 147
Basil Valentine ... ..	1, 3	Benzamic Acid... ..	12, 142
Bassia, Fats from various species of	16, 385	Benzamide ... ..	12, 139
Bassic Acid ... ..	16, 365	Benzamil ... ..	12, 210
Bassorin ... ..	15, 206	Benzanilide ... ..	12, 155
Batrachite ... ..	3, 401	Benzene, decomposition of ...	11, 137
Battery, Galvanic or Voltaic, <i>see</i>		„ from Boghead cannell	
Galvanic Battery.		coal ... ..	13, 386
Baulite ... ..	3, 451	„ formation of ... ..	11, 134
Baumé's Hydrometer, scale of	1, 10	„ preparation of, from	
„ quick flux ... ..	3, 69	benzoic acid ... ..	11, 134
Bayberry camphor ... ..	15, 52	„ preparation of, from	
Bay fat ... ..	16, 393	coal-tar ... ..	11, 134
„ preparation of Lauric acid		„ properties of ... ..	11, 137
from ... ..	15, 44	„ purification of ... ..	11, 138
Bay oil ... ..	14, 360	„ solvent properties of... ..	11, 138
Bdellium ... ..	17, 402	Benzhydramide... ..	12, 209
Beans, French, preparation of		Benzhydrolic acid ... ..	17, 395
Inosite from ... ..	15, 353	Benzidam ... ..	11, 246
„ volatile Oil of ... ..	14, 361	Benzidine ... ..	11, 338
Bear-berry, resin from ... ..	15, 421	Benzilam ... ..	12, 219
Bebiric acid ... ..	17, 173	Benzilates ... ..	12, 183
Bebirine ... ..	17, 170	Benzile ... ..	12, 184
Béchamp's Soluble Starch ...	15, 102	Benzile, hydrocyanate of ...	12, 185
Becher ... ..	1, 2	Benzilic Acid ... ..	12, 182
Beck's Hydrometer, scale of ...	1, 10	Benzilim ... ..	12, 218
Becquerel's Oxygen-circuit ...	1, 335	Benzilimide ... ..	12, 218
Becuiba Balsam ... ..	16, 396	Benzimic Acid ... ..	12, 146
Becuibin ... ..	18, 217	Benzimide ... ..	12, 212
Beech-nut oil ... ..	17, 94	Benzin ... ..	11, 134
Beech-tar, preparation of Car-		Benzo-acetic Acid, anhydrous	12, 95
bolic acid from ... ..	11, 140	„ Ether ... ..	12, 32

Benzoate of Allyl	11, 84; 13, 545	Benzoates, general properties	
„ Alumina ....	12, 40	of ....	12, 33
„ Ammonia ....	12, 38	„ Hydrocarbons isome-	
„ Amyl ....	12, 84	ric with naphthalin,	
„ Baryta ....	12, 39	obtained by the	
„ Benzoyl ....	12, 93	dry distillation of	
„ Benzyl ....	12, 53	the ....	14, 11
„ Benzylene ....	12, 225	Benzochlorhydrin ....	12, 105
„ Binitrophenyl ....	12, 90	Benzocinnamic Anhydride ....	13, 293
„ Bismuth ....	12, 41	Benzocuminic Anhydride ....	14, 157
„ Borneol ....	14, 355	Benzodulcitan ....	15, 380
„ Bromophenyl ....	12, 88	Benzoene ....	12, 226
„ Cadmium ....	12, 41	Benzoegenic Anhydride ....	14, 211
„ Cerium ....	12, 40	Benzoglycolates, metallic	12, 66—68
„ Cetyl ....	16, 381	Benzoglycolic Acid ....	12, 64
„ Cholesteryl ....	18, 118	Benzohelicin ....	15, 342, 444
„ Chromium ....	12, 40	Benzoic Acid ....	12, 32
„ Cinchonidine ....	17, 615	„ amorphous ....	12, 46
„ Cinchonine ....	17, 219	„ anhydrous ....	12, 93
„ Chlorophenyl ....	12, 89	„ emission of light	
„ Cobalt ....	12, 43	accompanying the	
„ Copper ....	12, 43	sublimation of ....	1, 208
„ Cumoglycol ....	14, 154	„ preparation of Ben-	
„ Cumyl ....	14, 157	zene from ....	11, 134
„ Cumylene ....	14, 154	Benzoic Alcohol ....	12, 18
„ Cœnanthyl ....	12, 462	„ Anhydride ....	12, 93
„ Ethyl ....	12, 60	„ Benzoate ....	12, 93
„ Ethylsalicyl ....	12, 260	„ Ether ....	12, 60
„ Eugenyl ....	14, 21	„ Cœnanthylate ....	12, 462
„ Glucina ....	12, 40	„ Salicylate ....	12, 283
„ Gold ....	12, 45	Benzoicin ....	12, 104
„ Iron ....	12, 42	Benzoïn ....	12, 173; 17, 383, 618
„ Lead ....	12, 41	„ flowers of ....	12, 32
„ Lime ....	12, 39	„ preparation of picric acid	
„ Lithia ....	12, 39	from ....	11, 213
„ Magnesia ....	12, 39	„ separation of the resins	
„ Manganese ....	12, 41	of ....	17, 384
„ Mercury ....	12, 44	Benzoinam ....	12, 216
„ Methyl ....	12, 56	Benzoinamide ? ....	12, 217
„ Methyl-salicyl ....	12, 258	Benzol ....	11, 134
„ Nickel ....	12, 43	Benzolactates ....	12, 92
„ Palladium ....	12, 45	Benzoline ....	12, 194
„ Phenyl ....	12, 86	Benzolone ....	12, 193
„ Platinum ....	12, 45	Benzomannitans ....	15, 379, 380
„ Potash ....	12, 38	Benzomyristic Anhydride ....	16, 216
„ Quinine ....	17, 617	Benzo-naphthionamide ....	14, 507
„ Salicylous Acid ....	12, 244	Benzone ....	12, 85
„ Silver ....	12, 45	Benzonitransisidide ....	12, 269
„ Soda ....	12, 39	Benzonitrile ....	12, 161
„ Strontia ....	12, 39	Benzonitrobenzoic Anhydride ....	12, 137
„ Sycoceryl ....	17, 45	Benzo-cœnanthylic Anhydride ....	12, 462
„ Ternitrophenyl ....	12, 91	Benzo-pelargonic Anhydride ....	13, 373
„ Tin ....	12, 41	Benzophenide ....	12, 87
„ Uranium ....	12, 41	Benzophenone ....	12, 85
„ Urea ....	13, 406	Benzopinite ....	15, 214
„ Valeryl ....	12, 96	Benzopiperide ....	15, 17
„ Yttria ....	12, 40	Benzoquercite ....	15, 217
„ Zinc ....	12, 41	Benzo-stearic Anhydride ....	17, 123
„ Zirconia ....	12, 40	Benzo-stilbin ....	12, 193



Benzosuccinin ....	13, 581	Benzylene, Hydrochlorate ....	12, 50
Benzosulphophenamide....	12, 156	„ Methylate ....	12, 221
Benzo-valeric Acid, anhydrous....	12, 96	„ Succinate ....	12, 225
Benzoyl ....	12, 184	„ Sulphate ....	12, 225
Benzoyl : Benzoate ....	12, 93	„ Sulphide ....	12, 49
„ Bromide ....	12, 107	„ Valerate ....	12, 224
„ Chloride ....	12, 108	Benzylic Alcohol ....	12, 18
„ „ combination of, with bichloro- vinic ether....	12, 111	„ preparation of toluene from....	12, 226
„ „ combination of, with bitter almond oil....	12, 111	Benzylic Ether....	12, 16
„ Cyanide ....	12, 118	Berberine ....	17, 185
„ Hydride ....	12, 18	Berberine Salts....	17, 189—196
„ Iodide ....	12, 107	Berberries, preparation of malic acid from ....	10, 210
„ Myristate ....	16, 216	Berengelite ....	17, 435
„ Peroxide ....	13, 446	Bergamot Oil ....	14, 281
„ Phenyl and Hydrogen, nitride of ....	12, 155	„ hydrate of ....	14, 345
„ Salicylide of ....	12, 244	„ stearoptene of ....	14, 345
„ Sulphide ....	12, 106	„ Camphor ....	14, 345
„ Sulphocyanide ....	12, 163	Bergaptene ....	13, 345
„ Sulphophenyl and Acetyl, nitride of ....	12, 159	Bergman, his researches on chemical affinity ....	1, 5
„ Sulphophenyl and Hy- drogen, nitride of ....	12, 157	Berries, blue and red colouring matters of ....	16, 528
Benzoylanilide ....	12, 165	Berthierite ....	5, 311
Benzoylazotide....	12, 206	Berthollet's researches on Affinity....	1, 5
„ Quadrat's com- pound resem- bling ....	12, 207	„ Basic Carbonate of Soda ....	3, 78
Benzoyl-benzoin ....	12, 176	„ Fulminating Silver	6, 172
Benzoyl-cinchonine ....	17, 234	„ Theory of Gaseous Mixture....	1, 21
Benzoyl-glucose ....	15, 333	„ Theory of Chemi- cal Combination 1, 149—152	
Benzoyl-phenylamide ....	12, 155	Beryl ....	3, 427
Benzoyl-phloroglucin ....	15, 71	„ preparation of Glucina from ....	3, 294
Benzoyl-quinine ....	17, 310	Berzeliite ....	4, 308
Benzoyl-salicin....	15, 441	Berzelius, chemical symbols introduced by ....	1, 50
Benzoyl-salicylamic Acid ....	12, 324	„ his exact determina- tions of combining proportions by weight ....	1, 6
Benzoyl-salicylamide ....	12, 324	„ electrochemical theory ....	1, 154
Benzoyl-salicylimide ....	12, 325	„ table of atomic weights, accord- ing to ....	1, 50
Benzoyl-urea ....	12, 154	„ theory of isomer- ism ....	1, 108
Benzoylureide ....	12, 216	„ theory of meta- merism....	1, 110
Benzureide ....	12, 154	„ theory of polymer- ism ....	1, 109
Benzyl ....	12, 184	„ and Marcet's camphoroidal com- pound ....	7, 360
„ Acetate ....	12, 52		
„ Benzoate ....	12, 53		
„ Chloride....	12, 50		
„ Cyanide ....	12, 52		
„ Ethylate ....	12, 17		
„ Iodide ....	12, 50		
Benzylate of Ethyl ....	12, 17		
Benzylene, Acetate ....	12, 224		
„ Amylate ....	12, 222		
„ Benzoate ....	12, 225		
„ Chloride ....	12, 51		
„ Ethylate ....	12, 221		
„ Hydriodate....	12, 50		

Berzelius and Marcet's camphoroïdal compound, solubility of in alcohol	8, 264	Bibenzoyl-glucose	.... 15, 335
Beta-erythrin	.... 17, 538	Bibenzoylimide....	.... 12, 190
Betaine....	.... 18, 188	Bibenzoylphenamide	.... 12, 156
Beta-orcein	.... 12, 358	Biborate of Amyl	.... 11, 47
Beta-orcin	.... 13, 150	„ Ethyl	.... 8, 396
Beta-orsellic Acid	.... 16, 295	„ Methyl	.... 7, 295
Beta-picroerythrin	.... 17, 539	„ Potash	.... 3, 25
Beta-quinidine	.... 17, 295	„ Soda	.... 3, 87
Beta-quinine	.... 17, 295	Bibromacetamide	.... 13, 532
Beta-thuja Resin	.... 15, 37	Bibromacetates....	.... 12, 535
Beta-usnic Acid	.... 17, 48	Bibromacetic Acid	.... 13, 531
<i>Betula alba</i> , Phlobaphene from the outer bark of	.... 15, 495	„ Ether	.... 13, 535
Betulin....	.... 17, 402	„ Ethers	.... 12, 532
Betuloretic Acid	.... 17, 403	Bibromallylamine	.... 13, 549
Betuloretinate of Strychnine	.... 17, 504	Bibromallylphosphine	.... 13, 577
Bezoardic Acid, <i>see</i> Ellagic Acid.		Bibromaniline	.... 11, 279
Bezoars, preparation of Ellagic Acid from	.... 16, 185	Bibromanisol	.... 12, 263
Biacetæscigenin	.... 18, 37	Bibromethylamine	.... 9, 63
Biacetamide	.... 12, 545	Bibromhydrin	.... 13, 574
Biacetate of Alumina	.... 8, 304	Bibromide of Allyl	.... 13, 542
„ Amylene	.... 13, 558	„ Bromonitrohar-	
„ Butylene	.... 13, 556	mine	.... 16, 113
„ Ethylene	.... 13, 430	„ Ethylene	.... 8, 366
„ Potash	.... 8, 299	„ Platinum	.... 6, 292
„ „ anhydrous	8, 337	„ Spiroyl	.... 12, 287
„ Propylene	.... 13, 555	„ Tellurium	.... 4, 410
„ Soda	.... 8, 300	„ Tin	.... 5, 84
Biacetin	.... 9, 496	Bibromimasatin	.... 13, 108
„ Glycolic	.... 13, 430	Bibromindin	.... 13, 87
Biacetochlorhydrin	.... 13, 580	Bibromisatic Acid	.... 13, 71
Biaceto-quercetic acid	.... 16, 489	Bibromisatin	.... 13, 70
Bicetylaniline	.... 16, 384	Bibromisatosulphurous Acid	.... 13, 72
Biallylamine	.... 13, 547	Bibromisatyde	.... 13, 99
Biallyl-urea	.... 13, 546	Bibromobichloronaphthalin	.... 14, 75
Biamaniline	.... 11, 332	Bibromobutyric Acid	.... 10, 136
Biamides	.... 7, 21	Bibromobutyric Ether	.... 10, 138
Biamylamine	.... 11, 107	Bibromocarboic Acid	.... 11, 168
Biamide of Sulphobenzoyl	.... 12, 150	„ „ Nitroben-	
Biamidobenzoic Acid	.... 12, 149	zoate of	12, 132
Biamidobenzylene, sulphate	.... 12, 150	Bibromocarmindin	.... 13, 116
Biamidocuminic Acid	.... 14, 176	Bibromochlorhydrin	.... 13, 578
Biamidomeconic Acid	.... 12, 435	Bibromocinchonine	.... 17, 236
Biamidosulphobenzene	.... 11, 348	Bibromomelaniline	.... 11, 356
Biantimonite of Potash	.... 4, 375	Bibromonaphthalin	.... 14, 32
Biarsenite of Potash	.... 4, 291	Bibromonaphthyl Bromide, <i>see</i>	
Biaxial or Potash Mica	.... 3, 449	Terbromonaphthalin	.... 14, 33
Bibenzanilide	.... 12, 155	Bibromonitracetonitrile	.... 12, 550
Bibenzoate of Ethylene	.... 13, 433	Bibromophenol....	.... 11, 168
Bibenzomannitan	.... 15, 379	Bibromophenyl: Nitrobenzoate....	12, 132
Bibenzosulphophenamide	.... 12, 159	Bibromophloretic Acid	.... 13, 330
Bibenzoyl, Bisulphophenyl, and Succinyl, binitride of....	.... 12, 160	Bibromosalicene and Hydrogen,	
Bibenzoyl and Phenyl, nitride of	12, 156	sulphide of	.... 12, 290
Bibenzoyl and Sulphophenyl, nitride of	.... 12, 159	Bibromosalicylic Acid	.... 12, 288
		Bibromosalicylous Acid	.... 12, 287
		Bibromostearic Acid	.... 17, 146
		Bibromosulphonaphthalates	.... 14, 33
		Bibromoterchloronaphthalin	.... 14, 80
		Bibromoveratrol	.... 13, 357
		Bibutyrate of Ethylene....	.... 13, 432



Bibutyryn ....	10, 94	Bichloride of Tin ....	5, 87
Bibutyroglucose ....	15, 332	„ „ Compound of,	
Bibutyromannitan ....	15, 375	with Cyanide of	
Bicarbonate of Ammonia ....	2, 434	Ethyl ....	13, 457
„ Baryta ....	3, 140	„ Tin, Compound of,	
„ Bisulphethyl ....	3, 446	with Cyanide of	
„ Magnesia ....	3, 230	Methyl ....	13, 412
„ Potash ....	3, 22	„ Tin with Terehlo-	
„ Soda ....	3, 84	ride of Arsenic....	5, 103
Bicarburet of Azote ....	11, 371	„ Titanium ....	3, 479
Bicarburetted Hydrogen		„ Tungsten ....	4, 35
	8, 164; 11, 134	Bichlorinated Ethylic Sulphide....	10, 513
Bichloracetal ....	13, 478	„ Hydrochloric Ether	9, 193
Bichloracetone ....	13, 464	„ Methylic Sulphide	10, 501
Bichloraniline ....	11, 285	„ Methyl Chloride,	
Bichlorethylamine ....	9, 63	Sulphite of ....	7, 350
Bichlorhydrin ....	9, 499	„ Methyl-ether ....	7, 350
Bichlorhydro-chloroplatinate of		„ Vinic Ether ....	9, 197
Diplatinamine....	6, 319	Bichlorindin ....	13, 88
Bichlorhydrokinone ....	11, 189	Bichloriodide of Tetramethy-	
„ coloured ....	11, 192	lium ....	12, 491
Bichlorhydronitrate of Diplatina-		Bichlorisamic Acid ....	13, 113
mine ....	6, 311	Bichlorisamide ....	13, 114
Bichlorhydrosulphate of Dipla-		Bichlorisatic Acid ....	13, 79
tinamine ....	6, 318	Bichlorisatin ....	13, 78
Bichloride of Anthracene ....	16, 168	Bichlorisato-sulphurous Acid ....	13, 81
„ Arsenmethyl ....	13, 498	Bichlorisatyde ....	13, 102
„ Carbon ....	7, 355	Bichlorisatydic Acid ....	13, 103
„ Glycerylene ....	13, 577	Bichlorobenzylene, Oxide of	12, 116
„ Hydrogen ....	2, 325	„ Sulphate of	12, 117
„ Iridium ....	6, 380	Bichlorobutyral ....	10, 140
„ „ and Ammo-		Bichlorobutyric Acid ....	10, 140
nium ....	6, 382	„ Ether ....	10, 142
„ Iridium and Potas-		Bichlorocarbolic Acid ....	11, 179
sium ....	6, 386	Bichlorocarbonic Ether....	9, 225
„ Iridium and Sodium	6, 391	Bichlorocinchonine ....	17, 237
„ Methylene ....	7, 288	Bichlorofilipelosates ....	15, 31
„ Osmium ....	6, 413	Bichloroharmine ....	16, 108
„ „ and Potas-		Bichlorokinhydrone ....	11, 192
sium ....	6, 418	Bichlorokinone ....	11, 188
„ Palladium ....	6, 349	Bichloromelaniline ....	11, 357
„ Pelargonene ....	13, 368	Bichloromethylic Acetate ....	9, 231
„ Platinum ....	6, 294	Bichloronaphthalin ....	14, 41
„ „ Compound		Bichloronaphthalin, Bihydro-	
of with cyanide of		chlorate of ....	14, 46
ethyl ....	13, 457	Bichlorophenol ....	11, 178
„ Platinum, with nitric		Bichlorophthalic Acid ....	13, 17
oxide ? ....	6, 295	Bichloropteritannic Acid	15, 502
„ Ruthenium ....	6, 401	Bichlorosalicin ....	15, 447
„ Selenium ....	2, 345	Bichlorosalicin, compound of,	
„ Sulphur ....	2, 334	with Perchlorosalicin	15, 449
„ „ Carbonate		Bichlorosalicylic Acid ....	12, 298
of ....	2, 337	Bichlorosalicylous Acid....	12, 297
„ „ with Pen-		Bichlorosaligenin ....	12, 297
tachloride of Anti-		Bichloro-sulphosomethylic Acid	7, 302
mony ....	4, 370	Bichlorosulphonaphthalates	14, 45
„ Sulphur, Sulphate		Bichlorotannaspidic Acid	15, 497
of ....	2, 345	Bichloroterebene ....	14, 439
„ Tellurium ....	4, 412	Bichlorovinic Acetate ....	9, 235

Bichlorovinic Ether, combination of Chloride of Benzoyl with ....	12, 111	Biethyl-zincamide ....	13, 504
„ Formiate....	9, 231	Bifluoride of Platinum ....	6, 296
Bichromate of Ammonia with Protochloride of Mercury ....	6, 115	„ Tellurium ....	4, 413
Bichromate of Chromic Oxide $\text{Cr}^4\text{O}^9$ or $\text{Cr}^2\text{O}^3, 2\text{CrO}^3$ ....	4, 115	„ Tin, hydrated ....	5, 92
„ Lepidine ....	14, 104	„ Titanium, with Sesquifluoride of Iron ....	5, 292
„ Potash ....	4, 146	„ Vanadium ....	4, 96
„ Potash with Protochloride of Mercury ....	6, 115	<i>Bignonia Chica</i> , red colouring matter of ....	17, 19
„ Potash with Nitrate of Potash ....	4, 151	Bihydrate of Cajputene ....	14, 512
„ Potash, prepara- tion of oxygen by the action of sulphuric acid on ....	2, 22	„ Mesitylene ....	13, 343
„ Silver-oxide ....	6, 184	„ Methylene ....	7, 258
„ Soda ....	4, 152	Bihydrated Valerianic Acid ....	11, 29
Bicinnamylamine ....	13, 305	Bihydriodate of Cinchonidine....	17, 612
Bicitromannitan ....	15, 379	„ Quinine ....	17, 615
Bicumylamine ....	19, 508	„ Vanadic Oxide ....	4, 94
Bicupric Cyanurate with Ammo- nia ....	9, 455	Bihydrobromate of Bibromobi- chloronaphthalin ....	14, 75
Bicyanide of Palladium ....	8, 59	Bihydrobromate of Pentabromo- naphthalin ....	14, 37
„ Platinum with Chlo- ride of Ammonium ....	8, 47	Bihydrobromate of Quadribromo- naphthalin ....	14, 37
„ Platinum with Chloride of Po- tassium ....	8, 51	Bihydrobromate of Terbromo- chloronaphthalin ....	14, 73
Bicyanocodeine....	17, 42	Bihydrochlorate of Bibromobi- chloronaphthalin ....	14, 76
Bicyanomelaneline ....	11, 362	Bihydrochlorate of Bibromoter- chloronaphthalin ....	14, 81
Bicyanomenaphthylamine ....	14, 127	Bihydrochlorate of Bichloro- naphthalin ....	14, 46
Bichuyba Fat ....	16, 396	Bihydrochlorate of Bromochlo- ronaphthalin....	14, 72
Biethamylamine ....	11, 108	Bihydrochlorate of Cajputene ....	14, 514
Biethaniline ....	11, 307	„ Mandarin oil ....	14, 305
Biethyl, Plumbic ....	13, 510	„ Platinamine 6, 306, 314	
„ Stannic ....	13, 506	„ Quadrichlo- ronaphthalin ....	14, 62
Biethylamine ....	9, 64	Bihydrochlorate of Quintichloro- toluol ....	12, 292
Biethylate of Ethylene ....	13, 427	Bihydrochlorate of Terchloro- naphthalin ....	14, 56
Biethylene-biamine ....	13, 486	Bihydrochlorate of Terchloro- naphthalin, acid obtained from, by the action of nitric acid ....	14, 67
Biethylchloraniline ....	11, 309	Bihydrochlorate of Turpentine oil	14, 268
Biethyleonine ....	13, 172	„ Turpentine oil with Hydrochlorate of Terebene ....	14, 275
Biethyleyanuric Acid ....	13, 564	Bihydrochlorate of Vanadic oxide ....	4, 94
Biethyl-glycol ....	13, 427	Bihydrofluat of Ammonia ....	2, 488
Biethylin ....	9, 495	Bihydroseleniate of Magnesia ?	3, 239
Biethylmeconic Acid ....	12, 433	Bihydrosulphate of Ammonia ....	2, 452
Biethylphosphoric Acid ....	8, 401	„ Cyanogen ....	8, 118
Biethylpiperidine, Chloroplati- nate ....	10, 452	„ Cyanogen, compounds of, with Potassium, Lead, Copper, and Mercury....	8, 120
Bi-epibromhydrophosphoryl ....	13, 577		
Biethylsparteine ....	16, 283		
Biethyltoluidine ....	12, 341		
Biethyl-urea ....	13, 537		



Bihydrosulphate of Lime ....	3, 197	Binitride of Bisulphophenyl, Bi-	
„ Stannous ....	5, 80	benzoyl, and Suc-	
Bihydrosulphates of the Alkalies	2, 226	cinyI ....	12, 160
Bihydrotellurate of Ammonia ....	4, 414	„ Sulphobenzoyl, Phe-	
Biimides ....	7, 25	nyl, and Hydro-	
Bilberry Plant ....	16, 223	gen ....	12, 160
Bile, history of the investigation		<i>Binitrite d'Anthracénèse</i> , Lau-	
of ....	18, 63	rent's ....	16, 166
„ preparation of glycocholic		<i>Binitrite d'Anthracénise</i> , Lau-	
acid from ....	18, 57	rent's ....	16, 166
„ preparation of taurine		Binitroarbutin ....	15, 421
from ....	9, 284	Binitrobenzamide ....	12, 153
„ preparation of taurocholic		Binitrobenzene ....	11, 204
acid from ....	18, 65	Binitrobenzoate of Ethyl ....	12, 136
„ of the pig, pigment of ....	18, 80	Binitrobenzoates, metallic ....	12, 135
„ of serpents, pigment of ....	18, 80	Binitrobenzoene ....	12, 301
„ -pigments ....	18, 69	Binitrobenzoic Acid ....	12, 134
Biliary acid from guano ....	18, 69	Binitrobenzoyl of Hydrogen, Ni-	
Bilifuscin ....	18, 79	tride of ....	12, 153
Biliumin ....	18, 80	Binitrobromocarbolic Acid ....	11, 208
Biliprasin ....	18, 79	Binitrobromophenol ....	11, 208
Bilirubates, metallic ....	18, 75	Binitrocaprylene ....	13, 219
Bilirubin ....	18, 71	Binitrocarbolic Acid ....	11, 205
Biliverdin ....	18, 77	„ Nitroben-	
Bimannitate of Lime ....	15, 367	zoate of ....	12, 133
Bimethylamine....	13, 393	Binitrochlorobenzene ....	11, 211
Bimethyl-biethylammonium ....	13, 394	Binitrochrysene ....	15, 3
Bimethylocitric Acid ?....	11, 460	Binitrocuminate of Ethyl ....	14, 172
Bimolybdate of Potash ...	4, 69	Binitrocuminic Acid ....	14, 171
„ Soda ....	4, 73	Binitrocumol ....	13, 347
Binary Theory of Salts ....	2, 15	Binitrocymene ....	14, 217
„ two kinds of ra-		Binitrodiphenamic Acid ....	11, 345
dicals in the ....	7, 11	Binitroethylates, metallic ....	12, 557
Biniodate of Ferric Oxide ....	5, 250	Binitroethylic Acid ....	12, 555
„ Potash ....	3, 52	„ Ether ....	12, 560
„ Potash with Chlo-		Binitrogentianic Acid ....	16, 182
ride of Potassium	3, 72	Binitromelaniline ....	11, 358
„ Potash with Bisul-		Binitromesitylene ....	9, 20
phate of Potash ....	3, 71	Binitromesitylol ....	13, 347
„ Soda ....	3, 108	Binitromethylene Chloride ....	7, 360
Biniodethylamine ....	9, 63	Binitromethylic Acid ....	12, 494
Biniodide of Allyl ....	13, 541	Binitronaphthalin ....	14, 86
„ Arsenmethyl ....	13, 498	Binitrophenetol....	11, 271
„ Chloronitroharminine	16, 115	Binitrophenol ....	11, 205
„ Ethylene ....	8, 362	Binitrophenyl Benzoate ....	12, 90
„ Iridium ....	6, 378	„ Nitrobenzoate ....	12, 133
„ Mercury ....	6, 40	Binitrophloretic Acid ....	13, 331
„ Nitroharminine ....	16, 112	Binitropyrene ....	16, 249
„ Platinum ....	6, 291	Binitrosalicylates ....	12, 315
„ Tellurium....	4, 408	Binitrosalicylic Acid ....	12, 313
Biniodomelaniline ....	11, 356	Binitrosulphobenzene ....	11, 347
Biniodonitracetonitrile ....	12, 551	Binitrosulphonaphthalic Acid ....	14, 87
Biniodocodeine ....	17, 36	Binitrothymol ....	14, 444
Binitramidin ....	15, 100	Binitrotoluene or Binitrotoluol....	12, 301
Binitrammonyl....	12, 548	Binitroveratrol ....	13, 357
Binitraniline ....	11, 292	Binitroxanthracene ....	16, 170
Binitranisidine ....	12, 268	Binopiammone ....	14, 435
Binitranisoïn ....	14, 218	Binoxide of Arsenmethyl ....	13, 495
Binitrazobenzene ....	11, 344	„ Barium ....	3, 138

Binoxide of Chlorocaprylene ....	13, 216	Bismuth, Arsenide ....	4, 449
„ Hydrogen ....	2, 73	„ Benzoate ....	12, 41
„ Iridium ....	6, 373	„ -blende or Bismuthite	4, 448
„ Lead ....	5, 120	„ Borate ....	4, 448
„ Manganese....	4, 205	„ Bromate ....	4, 438
„ Molybdenum ....	4, 51	„ Bromide ....	4, 438
„ Nitrogen ....	2, 377	„ Carbonate ....	4, 433
„ Osmium ....	6, 407	„ Chloride ....	4, 438
„ Palladium ....	6, 345	„ Chromate ....	4, 449
„ Platinum ....	6, 283	„ Croconate ....	10, 393
„ Ruthenium ....	6, 398	„ Crystalline Polarity of	1, 517
„ Tellurium ....	4, 397	„ Cuprocyanide....	8, 7
„ Tin ....	5, 71	„ Diamagnetic properties of	1, 513
„ Trimethylphosphine	12, 492	„ Fluoride ....	4, 440
„ Tungsten ....	4, 25	„ Formiate ....	7, 279
„ Vanadium ....	4, 83	„ Gallate ....	12, 409
Bioleate, Mannitic ....	17, 100	„ Hydride ? ....	4, 433
Bioxides, <i>see</i> Binoxides.		„ Iodate ....	4, 437
Bioxymethylene ....	13, 389	„ Iodides ....	4, 436
Bioxyprotein ....	18, 264	„ Lactate ....	11, 487
„ from horn ....	18, 350	„ Metaphosphate ....	4, 434
Bioxystrychnine ....	17, 506	„ Molybdate ....	4, 418
Bioxysulphocarbonate of Amyl....	11, 62	„ Nitrates ....	4, 440
„ Ethyl....	8, 441	„ Oxalate 9, 150 ; 13, 524	
Bipalmitin ....	16, 377	„ Oxides ....	4, 428
Biphenaniline ....	11, 334	„ Oxide, hydrated ....	4, 430
Biphenethaniline ....	11, 336	„ Oxychloride ....	4, 439
Biphosphamide....	2, 439	„ Oxy-iodide ....	4, 437
Biphosphomethyl ....	7, 328	„ Oxysulphocyanide ....	8, 86
Biplumbic Triethyl ....	13, 511	„ Peroxide ....	4, 431
Bipyromucamide ....	10, 405	„ Persulphomolybdate ....	4, 448
Bipyrotartramide ....	11, 102	„ Phosphate ....	4, 434
Birch-camphor ....	17, 402	„ Phosphide ....	4, 433
Birch-leaves, oil of ....	14, 361	„ Phosphite ....	4, 434
„ -oil, empyreumatic	14, 324	„ Pyrophosphate ....	4, 434
Birds' Feathers, colouring mat-		„ Pyrotartrate ....	11, 93
ters of ....	18, 419	„ Rhodizonate ....	10, 403
Birthwort Bitter ....	18, 215	„ Saccharate ....	11, 519
Biselenide of Silver ....	6, 156	„ Salts ....	4, 430
„ Trimethylphosphine	12, 492	„ Selenide ....	4, 436
Biselenite of Ammonia....	2, 464	„ Silicide ....	4, 418
„ Ferrous ....	5, 247	„ Suboxide ? ....	4, 428
„ of Nickel ....	5, 374	„ Succinate ....	10, 124
„ Uranic ....	4, 178	„ Sulphantimoniate ....	4, 450
„ of Zinc ....	5, 27	„ Sulpharseniate ....	4, 449
Bisethyl ....	9, 89	„ Sulpharsenite ....	4, 449
Bisilicate of Alumina ....	3, 415	„ Sulphates ....	4, 435
„ Ethyl ....	8, 481	„ Sulphides ....	4, 434
„ Ferric Oxide ....	5, 282	„ Sulphite ....	4, 435
„ Potash ....	3, 371	„ Sulphocacodylate ....	9, 337
Bismethyl ....	9, 86	„ Sulphocarbonate ....	4, 436
Bismuth ....	4, 427	„ Sulphocyanide ....	8, 86
„ Acetate ....	8, 308	„ Sulphomolybdate ....	4, 418
„ Amalgam ....	6, 122	„ Sulphotelluride ....	4, 450
„ Alloys....	4, 450	„ Sulphotellurite ....	4, 450
„ Ammonio-chloride ....	4, 444	„ Sulphotungstate ....	4, 418
„ Ammonio-iodide ....	4, 444	„ Tannate ....	15, 167
„ Antimonide ....	4, 449	„ Tartrate ....	10, 310
„ Arseniate ....	4, 449	„ Telluride ..	4, 450



Bismuth, Terhydrochlorate ....	4, 439	Bisulphanilate of Baryta ....	11, 299
„ Valerate ....	11, 34	„ „ Silver ....	11, 299
Bismuth and Ammonium, chlo-		Bisulphanilie Acid ....	11, 298
ride ....	4, 444	Bisulphate of Ammonia ....	2, 462
„ and Ammonium, oxalate 13,	524	„ Ferric Oxide ....	5, 243
„ and Copper, alloy ....	5, 477	„ Potash ....	3, 7
„ and Copper, sulphide of 5,	477	„ with Biniodate of	
„ Copper and Lead, sul-		„ Potash ....	3, 71
phide ....	5, 488	„ Soda ....	3, 103
„ Antimony and Tin,		„ Stibmethylium ....	7, 325
alloys ....	5, 104	„ Telluric Oxide ....	4, 107
„ and Gold, alloy ....	6, 238	„ Terchloride of Sul-	
„ and Iron, cyanides ....	7, 489	phur ....	2, 342
„ and Lead, alloy ....	5, 178	„ Uranic Oxide ....	4, 177
„ and Lead, amalgam ....	6, 127	„ Vanadic Acid ....	5, 93
„ Lead, and Tin, alloys 5,	180	„ Zinc-oxide ..	5, 26
„ and Nickel, alloy ....	5, 393	Bisulphetholic Acid ....	12, 516
„ and Nickel, sulphide....	5, 393	Bisulphethyl, Bicarbonate ....	8, 446
„ and Palladium, alloy....	6, 356	Bisulphethylosulphuric Acid ....	8, 411
„ and Platinum, alloy ....	6, 333	Bisulphide of Amyl ? ....	11, 40
„ and Potassium, bis-		„ Arsenmethyl ....	13, 497
muthate ....	4, 445	„ Bismuth ....	4, 434
„ and Potassium, chlo-		„ Cacodyl ....	9, 334
ride ....	4, 447	„ Carbon ....	2, 200
„ and Potassium, iodide 4,	447	„ Carbon, Ioduretted 2,	268
„ and Potassium, oxalate 13,	524	„ Carbon, mixture of,	
„ and Rhodium, alloy ....	6, 368	with volatile oils 7,	168
„ and Silver, alloy ....	6, 193	„ Carbon, Sulphuretted 2,	205
„ and Sodium, bismuth-		„ Cobalt ....	5, 332
ate ....	4, 447	„ Ethyl ....	8, 351
„ and Sodium, chloride....	4, 448	„ Ethylene....	8, 354
„ and Tin, alloys ....	5, 104	„ Iridium ....	6, 376
„ and Tin, amalgam ....	6, 126	„ Iron ....	5, 232
„ Tin and Lead, amalgam 6,	128	„ Iron, with Proto-	
„ and Tungsten ....	4, 448	arsenide of Iron 5,	309
„ and Zine, alloy ? ....	5, 51	„ Methyl ....	7, 283
Bismuthate of Bismuth-oxide		„ Nickel ....	5, 371
and Potash ....	4, 445	„ Nickel, with Anti-	
„ of Potash ....	4, 445	monide of Nickel 5,	393
„ Bismuth and Soda 4,	447	„ Nickel, with Proto-	
Bismuth-glance ....	4, 450	arsenide of Nickel 5,	391
Bismuthic Acid ....	4, 432	„ Osmium ....	6, 411
Bismuthide of Iron ....	5, 312	„ Platinum ....	6, 287
„ Iron and Potas-		„ Potassium ....	3, 32
sium ....	5, 312	„ Tellurium ....	4, 405
„ Potassium ....	4, 445	„ Tin ....	5, 79
„ Sodium ....	4, 447	„ Trimethylphosphine 12,	492
Bistannamyl ....	11, 131	„ Tungsten ....	4, 32
Bistannic Triethyl ....	13, 507	Bisulphisatyde ....	13, 104
Bistearate of Dulcetyl ....	17, 128	Bisulphite of Aldehyde-ammonia 9,	287
„ Ethylene 13, 434 ; 17,	116	„ Ammonia anhy-	
„ Pinityl ....	17, 125	drous ....	2, 455
„ Quercetyl....	17, 126	„ Ammonia ....	2, 457
Bistearoglucose ....	17, 126	„ Ammonia with	
Bistcaryl-glycerophosphoric acid,		Acetone ....	13, 469
produced by decompo-		„ Osmious oxide with	
sition of lecithine ....	18, 377	Chloride of Potas-	
Bisuccinamide ....	10, 152	sium ....	6, 419
Bisul-hyposulphuric Acid ....	2, 164	„ Potash ....	3, 38

Bisulphite of Potash with Salicy-					Bitter Almond oil with Hydro-				
lous Acid	....	12,	241		cyanic acid	12,	28		
„ Soda	....	3,	100		Bitter Almond Water	....	12,	29	
Bisulphites, Alkaline, compounds					„ valuation of	12,	30		
of, with Acetone	10,	522			„ and Laurel				
„ Alkaline, compounds					Water, dis-				
of, with Bitter					tinction be-				
Almond Oil	....	12,	27		tween	....	12,	31	
„ Alkaline, compounds					Bitter of Aloes, artificial	....	12,	1	
of with Cinnamic					Bitter, artificial, of extract of				
Aldehyde	....	13,	263		Brazil-wood	....	11,	228	
„ Alkaline, compounds					Bitter of Lycopodium	....	16,	98	
of, with Cuminol...	14,	147			Bitter Salt	....	3,	236	
„ Alkaline, compounds					Bitter Spar	....	3,	253	
of, with Glyoxal...	12,	501			<i>Bitumen candidum</i>	....	12,	439	
„ Alkaline, compounds					Bitumen, liquid	....	12,	439	
of, with Nitroben-					Bituminous Marl-slate, vanadium				
zaldide	....	12,	121		in	....	4,	181	
„ Alkaline, compounds					„ Shale, paraffin from	18,	167		
of, with Rue-oil	....	14,	493		Bitungstate of Ammonia	....	4,	37	
„ Alkaline, compounds					„ Cadmium	....	5,	65	
of, with Salicylous					„ Cobalt	....	5,	346	
acid	....	12,	241		„ Copper	....	5,	466	
Bisulphobenzolic Acid	....	11,	156		„ Iron	....	5,	296	
Bisulphohydrokinonates	....	16,	240		„ Lead	....	5,	167	
Bisulphometholic Acid...	....	12,	484		„ Lithia	....	4,	42	
Bisulphonaphthalates	....	14,	22		„ Magnesia	....	4,	425	
Bisulphophenyl, Bibenzoyl and					„ Manganese	....	4,	426	
Succinyl, binitride of	....	12,	160		„ Nickel	....	5,	326	
Bisulphuretted Vinic Ether	....	9,	4		„ Potash	....	4,	39	
Bitartrate of Potash	....	10,	275		„ Soda	....	4,	41	
Bitellurate of Ammonia	....	4,	414		„ Strontia...	....	4,	44	
„ Lithia	....	4,	423		Bivalerin	....	11,	76	
„ Potash	....	4,	418		Bivanadiate of Ammonia	....	4,	98	
„ Soda	....	4,	421		„ Baryta	....	4,	101	
Bitelluride of Ethyl	....	8,	387		„ Cadmium	....	5,	65	
Bitellurite of Lime	....	4,	424		„ Copper	....	5,	467	
„ Lithia	....	4,	422		„ Lead	....	5,	618	
„ Potash	....	4,	416		„ Lime	....	4,	102	
„ Silver-oxide?	....	6,	192		„ Lithia	....	4,	101	
„ Soda	....	4,	420		„ Magnesia	....	4,	102	
Bitiobenzolic Acid	....	11,	237		„ Manganese	....	4,	247	
Bitranisol	....	12,	264		„ Potash	....	4,	99	
Bitter Almond Oil	....	12,	19		„ Soda	....	4,	100	
„ behaviour of					„ Strontia...	....	4,	102	
crude com-					„ Zinc	....	5,	48	
mercial, with					Bivinechloraniline	....	11,	309	
Ammonia	....	12,	25		<i>Bixa Orellana</i> , red colouring				
„ with Bichloride					matter of	....	16,	520	
of Tin	....	12,	28		Black, his experiments on aëri-				
„ with Alkaline					form bodies	....	1,	4	
Bisulphites	12,	27			Black Copper	....	5,	406	
„ Camphor or					„ Flux	....	3,	20	
Stearoptene of	12,	173			„ Oxide of Copper...	....	5,	406	
„ combination of,					„ Oxide of Mercury	....	6,	5	
Benzoyl Chlo-					„ Pig Iron...	....	5,	212	
ride with	....	12,	111		„ Pitch	....	15,	151, 153	
„ with Cyanic					„ Pigment of the Eye	....	18,	417	
Acid	....	12,	28		„ Poplar Buds, wax of	....	18,	162	



Black Uranoso-uranic Oxide ....	4, 161	Boerhaave, his experiments on	
Bladders, diffusion of gases		Light, Heat, &c. ....	1, 4
through ....	1, 25	Bog-butter ....	16, 386
,, endosmotic action		,, Iron-ore ....	5, 228
through ....	1, 28	Boghead Coal, Paraffin from ....	18, 167
Blanquette ....	3, 78	Boheic Acid ....	12, 473
Blast Furnace ....	2, 35	Bohemian Glass ....	3, 380
Bleaching Acid....	2, 289	Boiling ....	1, 272
Bleaching of coloured fabrics by		Boiling heat, effect of, in arrest-	
exposure to sunshine ....	7, 95	ing fermentation ....	7, 100
Bleaching Liquid ....	3, 210	Boiling point ....	1, 260
,, power of Hypochlo-		,, how affected by	
rites ....	2, 303	the state of sur-	
Blende ....	5, 19	face of the con-	
,, Antimonial ....	4, 359	taining vessel ....	1, 275
Blistered Steel ....	5, 206	,, variations in ....	1, 274
Block Tin ....	5, 67	,, variation of, result-	
Blood, arterial, action of nitrites		ing from the pre-	
on ....	18, 394	sence of foreign	
,, colouring matter of ....	18, 386	bodies ....	1, 276
,, coagulation of ....	18, 319	Boiling points of aqueous solutions,	
,, fat of ....	16, 486	tables of ....	1, 269, 270
,, occurrence of syntonin in	18, 268	,, of Hydrocarbons,	
,, phenomena exhibited by,		table of....	7, 154
,, during fermentation ....	7, 103	,, of organic com-	
,, preparation of cratinine		pounds ....	7, 55
from ....	10, 256	,, of organic com-	
,, spectrum of ....	18, 389—394	pounds, effect	
,, -corpuscles, globulin of ....	18, 332	produced on, by	
,, -crystals of doubtful nature	18, 403	addition and sub-	
,, -fibrin ....	18, 319	traction of dif-	
,, -red ....	18, 386, 395	ferent elements....	7, 57
Blowpipe-flame....	2, 32	,, rise of, in successive	
,, coloration of, by		terms of homolo-	
horny tissue, ge-		gous series ....	7, 55
latin, chondrin,		,, table of ....	1, 291
chitin, and albu-		Bole ....	3, 418
minous sub-		Bole of Sinope ....	3, 414
stances ....	18, 257	Boloretin ....	17, 435
Blue colouring matter of Berries	16, 528	Bone, organic basis of ....	18, 352
,, ,, Roots ....	16, 531	Bone-ash, preparation of phos-	
Blue Copper ....	5, 422	phorus from ....	2, 103
,, Copper-ore ....	5, 415	,, preparation of phos-	
,, of Flowers ....	16, 522	phoric acid from ....	2, 128
,, Galbanum oil ....	17, 238	Bone-earth ....	3, 192
,, Indigo-vat ....	13, 38	,, -gelatin ....	18, 353
,, Iron-ore ....	5, 224	,, -oil ....	18, 256
,, Iron-stone ....	5, 280	,, preparation of picoline	
,, Metal ....	5, 398	from....	11, 264
,, Oxide of Iridium ....	6, 371	Bones and flesh of animals,	
,, ,, with Alu-		supposed occurrence of arsenic	
mina ?....	6, 391	in ....	4, 250
,, ,, with Lime ....	6, 391	Bonnonian Phosphorus ....	1, 193
,, Molybdenum ....	4, 53	Bonsdorff's Evaporating Receiver	1, 289
,, Osmium....	6, 406	Boracic Acid ....	2, 97
,, Platinum ....	6, 282	,, action of on alcohol	8, 243
,, Pigment of the Bile ....	18, 73	,, hydrofluates of ....	2, 363
,, Prussian ....	7, 435, 437	,, solution of, in alco-	
,, Vitriol ....	5, 427	hol ....	8, 263

Boracic Acid and Potash, racemate of....	10, 350	Borate of Zinc	5, 17
„ and Potash, tartrate of	10, 280	„ Zirconia	3, 344
„ and Soda, tartrate of	10, 281	Borates, metallic	2, 99
„ Soda and Potash, racemate of	10, 352	„ metallic compounds of, with double silicates....	3, 453
„ with Tartaric Acid	10, 272	Borax	3, 87
Boracic Ether, terbasic....	8, 394	„ compound of, with cane-sugar	15, 284
Boracite	3, 231	„ compound of, with hæmatoxylin....	16, 291
„ electrical properties of	1, 320	„ fused, electrolysis of	1, 460
Boraginaceous Plants, nitrogenous substances occurring in	18, 452	„ with Platinous oxide	6, 324
<i>Borago off.</i> eremacausis of extract of	7, 92	<i>Borax tartarisata</i>	10, 283
Borates of Alumina	3, 309	„ and Potash, tartrate of....	10, 283
„ Ammonia	2, 435	Bordeaux Turpentine	18, 17
Borate of Amyl, tribasic	11, 46	Boric Fluoride, sulphate of	2, 364
Borates of Baryta	3, 140	Boride of Iron and Potassium....	5, 268
Borate of Bismuth	4, 433	„ Nitrogen and Copper?	5, 448
„ Cadmium	5, 56	„ „ Zinc?	5, 36
Borate, Chromic	4, 122	„ Platinum?	6, 286
„ Chromous	4, 122	„ Potassium	3, 25
„ of Cobalt	5, 329	Borneene	14, 312
„ Cupric	5, 415	„ from the camphor-oil of <i>Dryabalanops Camphor</i>	14, 313
„ of Ethyl	12, 512	Borneo-camphor, solid	14, 332
„ Ferric	5, 222	Borneol	14, 332
„ Ferrous	5, 222	„ Alcohol	14, 332
„ of Lead	5, 128	„ Benzoate	14, 355
„ „ fused, electrolysis of	1, 463	„ Hydrochlorate....	14, 353
„ of Lime	3, 189	„ Lævo-rotatory	14, 334
„ Lithia	3, 128	Borofluoride of Copper....	5, 443
„ Magnesia	3, 230	„ „ Lead	5, 151
„ „ hydrofluuate of	3, 243	Boron	2, 95
„ Magnesia and Ammonia	3, 245	„ Ammoniofluoride of	2, 489
„ „ and Potash	3, 249	„ aqueous solution of	2, 96
„ „ and Soda	3, 251	„ chloride of	2, 327
„ Manganous....	4, 214	„ fluoride of	2, 362
„ Methyl, terbasic	7, 294	„ and Lithium, fluoride	3, 131
„ Molybdic Acid	4, 58	Boronitride of Lead?	5, 158
„ „ Oxide	4, 57	Boronitride of Potassium	3, 70
„ Molybdous Oxide	4, 57	Borosilicate of Lead-oxide	5, 165
„ Nickel	5, 368	„ „ Lime	3, 392
„ Potash	3, 25	Boruretted Hydrogen Gas	2, 100
„ Quinine	17, 275	<i>Boswellia serrata</i> , resin of	17, 427
„ Silver	6, 147	Botany Bay, yellow resin of	17, 386
„ Soda	3, 87	„ „ Resin, volatile oil of	14, 362
„ Stannic	5, 77	Botany, Chemical, subjects of	7 1
„ of Strontia	3, 171	Böttger's Electrottype apparatus	1, 505
„ Tantallic Acid	4, 4	Botryogen	5, 274
„ Thorina	3, 332	Botryolite	3, 393
„ Uranic	4, 170	Bottle-glass	3, 379
„ Vanadic	4, 90	Bottom-yeast	15, 268
„ of Vanadous Sulphide	4, 94	Boucherie's process for saturating wood with different liquids	7, 115
„ Yttria	3, 286	Boulangerite	5, 176
		Bournonite	5, 487



Boyle, his experiments on the vacuum ....	1, 4	Bromanisol ....	12, 262
Brain, preparation of cerebrin from ....	16, 480	Bromaniso-nitranisic acid ....	13, 141
„ preparation of lecithine from ....	18, 375	Bromanchlonaphitone, A., Laurent's ....	14, 79
„ -fat, phosphoretted ....	16, 484	Bromanthracene, bromide of ....	16, 168
„ preparation of furfurol from ....	10, 371	Bromates ....	2, 278
Branches of Chemistry....	1, 2	Bromate of Alumina ....	3, 315
Branchite ....	18, 249	„ Ammonia ....	2, 469
Brandt, his discovery of Phosphorus ....	1, 4	„ Baryta ....	3, 156
Brandt's Phosphorus ....	2, 102	„ Bismuth-oxide ....	4, 438
Brandy-vinegar ....	8, 284	„ Cadmic oxide ....	5, 60
Brasilin ....	17, 542	„ Cerous oxide ....	3, 270
Brass ....	5, 479	„ Cobalt-oxide ....	5, 336
„ Platinum deposits on ....	6, 276	„ Cupric oxide ....	5, 437
Brassica oils ....	17, 554	„ Chromic oxide ....	4, 130
<i>Brayera anthelmintica</i> , acrid bitter resin of....	18, 123	„ Ethylostannethyl ....	9, 106
Braziers' solder ....	5, 480	„ Ferric oxide ....	5, 251
Brazilian Clove, resin of ....	17, 450	„ Lanthanum ....	3, 279
Brazil-nut oil ....	16, 398	„ Lead-oxide....	5, 145
Brazil-wood, colouring matter of „ extract, artificial bitter or tannin of	17, 542 11, 228	„ Lime ....	3, 206
„ preparation of styphnic acid from ....	11, 229	„ Lithia ....	3, 130
Brean ....	17, 421	„ Magnesia ....	3, 241
Breant's method of saturating wood with different liquids ....	7, 115	„ Manganous ....	4, 227
Breidin....	17, 398	„ Mercuric ....	6, 45
Brein ....	17, 397	„ Mercuric, with Mercuric Amide ....	6, 83
Breithaupt's crystallographical nomenclature ....	1, 17	„ Mercurous ....	6, 44
Breithauptite ....	5, 422	„ Mercurous, with Ammonia ? ....	6, 83
Brevicite ....	3, 435	„ of Methylostannethyl....	9, 104
Brewsterite ....	3, 447	„ Nickel-oxide ....	5, 377
Brightness of Flames, conditions of ....	2, 30	„ Palladious ....	6, 348
<i>Brindonia indica</i> , fat of ....	16, 387	„ Platinous ....	6, 293
British Bell-metal ....	5, 488	„ of Potash ....	3, 54
Brochantite ....	5, 425	„ Silver ....	6, 160
Bromacetates ....	12, 532	„ Soda ....	3, 110
Bromacetic Acid ....	12, 532	„ Stannous ....	5, 84
„ Ether ....	12, 534	„ of Stibethylum ....	10, 528
Bromacetone ....	13, 464	„ Strontia ....	3, 177
Bromal....	9, 188	„ Uranic ....	4, 179
Bromaloin ....	16, 464	„ of Yttria ....	3, 289
Bromanilamic Acid ....	11, 238	„ Zinc ....	5, 30
Bromanilamide....	11, 239	Bromazoxybenzene ....	11, 342
Bromanil ....	11, 172	Bromenchlonaphitose, A., Laurent's ....	14, 78
Bromanilic Acid ....	11, 171	Bromerucic acid ....	17, 560
Bromaniline ....	11, 278	Bromethose ....	9, 187
Bromanisate of Ethyl ....	13, 134	Bromethylene, Bromide ....	13, 502
„ Methyl ....	13, 133	Bromeuxanthic Acid ....	17, 535
„ Silver ....	13, 133	Bromhelicin ....	15, 444
Bromanisic Acid ....	13, 132	Bromhydranil ....	11, 172
		Bromhydrin, glycolic ....	13, 428
		„ hexaglyceric ....	13, 576
		Bromhydrins, preparation of ....	13, 573
		Bromhydrodichlorhydrin ....	13, 578
		Bromic Acid ....	2, 277
		Bromide of Acetyl 9, 187; 10, 536	
		„ Acetyl, action of, on glycerin ....	13, 580

Bromide of Acetostannethyl ....	9, 102	Bromide of Iodine ....	2, 285
„ Aluminum ...	3, 314	„ Lead ....	5, 144
„ Amidogen ....	2, 469	„ Lead and Potassium	5, 162
„ Ammonium ....	2, 469	„ Lead and Sodium ....	5, 163
„ Amyl ....	9, 42	„ Magnesium ....	3, 240
„ Anisyl ....	13, 132	„ Manganese ....	4, 227
„ Antimony ....	4, 364	„ Mercuric ....	6, 42
„ Arsenic ....	4, 283	„ Mercuric, with Alkar-	
„ Barium ....	3, 156	sin ....	9, 323
„ Barium with Cya-		„ Mercurous ....	6, 42
nide of Mercury ....	8, 27	„ of Mercury and Ammo-	
„ Benzamide....	12, 142	nium ....	6, 83
„ Benzoyl ....	12, 107	„ Mercury and Barium	6, 106
„ Bismuth ....	4, 438	„ Mercury and Hydro-	
„ Bromanthracene ....	16, 168	gen ....	6, 44
„ Bromethylene ....	13, 532	„ Mercury and Iron ....	6, 129
„ Bromopropylene ....	13, 552	„ Mercury and Magne-	
„ Bronaphthin, Lau-		sium ....	6, 109
rent's ....	14, 34, 35	„ Mercury and Man-	
„ Butyl ....	10, 101	ganese ....	6, 116
„ Butylene ....	10, 104	„ Mercury and Potas-	
„ Cacodyl ....	9, 341	sium ....	6, 101
„ Cadmium ....	5, 59	„ Mercury and Sodium	6, 104
„ Cadmium and Potas-		„ Mercury and Stron-	
sium ....	5, 64	tium ....	6, 107
„ Cajputene ....	14, 515	„ Methyl ....	7, 286
„ Calcium ....	3, 204	„ Methylene....	13, 391
„ Calcium with Am-		„ Methyloplumbethyl	9, 108
monia ....	3, 214	„ Methylostannethyl....	9, 103
„ Calcium with Cya-		„ Nickel ....	5, 376
nide of Mercury ....	8, 23	„ Nitrogen ....	2, 469
„ Camphor ....	14, 348	„ Palladium ....	6, 348
„ Capryl ....	13, 194	„ Phosphorus ....	2, 281
„ Carbon, solid ....	7, 341	„ Platinum ....	6, 292
„ Cerium ....	3, 270	„ Potassium ....	3, 53
„ Cetyl ....	16, 369	„ Potassium with Cy-	
„ Chlorostilbene ....	12, 170	anide of Mercury....	8, 20
„ Chloroxethose ....	9, 224	„ Propylene 9, 397; 13, 552	
„ Chromium....	4, 130	„ Salicyl ....	12, 289
„ Cobalt ....	5, 335	„ Selenethyl....	8, 356
„ Cupric ....	5, 436	„ Selenium ....	2, 285
„ Cuprous ....	5, 435	„ Silicium ....	3, 360
„ of Cyanogen ....	8, 139	„ Silver ....	6, 159
„ Cyanogen, solid ....	9, 462	„ Silver, paper im-	
„ Cymyl and Hydro-		pregnated with ....	1, 176
gen ....	14, 214	„ Sodium ....	3, 109
„ Ethyl ....	8, 365; 12, 513	„ Sodium with Cya-	
„ Ethyl, action of mer-		nide of Mercury ....	8, 21
curic oxide on ....	13, 417	„ Spiroyl ....	12, 284
„ Ethyl, action of water		„ Stannethyl....	9, 98
on ....	13, 418	„ Stannic ....	5, 84
„ Ethyl, preparation of	13, 451	„ Stannous ....	5, 84
„ Ethylene-stannethyl	9, 100	„ of Stibethyl ....	9, 83; 10, 526
„ Ethylidene....	13, 451	„ Stibethylum ....	10, 528
„ Ethylostannethyl ....	9, 105	„ Stibmethylum ....	7, 327
„ Ferric ....	5, 250	„ Stilbene ....	12, 170
„ Ferrous ....	5, 250	„ Strontium ....	3, 176
„ of Glucinum ....	3, 299	„ Strontium with Cyan-	
„ Gold ....	6, 214	nide of Mercury ....	8, 22



Bromide of Styrol	....	13, 15	Bromine Salts	....	2, 9
„ Sulphur	....	2, 283	„ sources of	....	2, 272
„ Telluramyl	....	11, 45	„ substitution of, for Hy-		
„ Tellurethyl	....	8, 385	drogen	....	7, 73
„ Tellurium	....	4, 410	„ substitution of, for Hy-		
„ Telluromethyl	....	10, 494	drogen in organic		
„ Tetrethylum	....	9, 68	compounds	....	7, 122
„ Thorinum	....	3, 334	Bromiodoform	....	7, 336
„ Thorinum and Potas-			Bromisatic Acid	....	13, 70
sium	....	3, 336	Bromisatin	....	13, 69
„ Tin	....	5, 84	Bromnaphtalise, <i>see</i> Bibromonaphthalin.		
„ Triethylphosphine	....	12, 525	Bromnaphtese, <i>see</i> Bibromonaphthalin.		
„ Uranium	....	4, 179	Bromnaphtalise, <i>see</i> Terbromonaphthalin.		
„ Valeryl	....	11, 527	Bromnaphtese, <i>see</i> Terbromonaphthalin.		
„ Yttrium	....	3, 289	Bromo-aurate of Barium	....	6, 233
„ Zinc	....	5, 29	„ Magnesium	....	6, 234
„ Zirconium, hydrated	....	3, 345	„ Manganese	....	6, 237
Bromides, Metallic	....	2, 285	„ Potassium	....	6, 228
„ Metallic, action of, on			„ Sodium	....	6, 232
Alcohol	....	13, 418	„ Zinc	....	6, 239
„ Metallic, Compounds			Bromobenzoic Acid	....	12, 107
of, with Ammonia	....	2, 427	Bromobichlorhydrin	....	13, 578
„ Metallic, Electrolysis			Bromobichloronaphthalin	....	14, 72
of	....	1, 456	Bromobinitronaphthalin	....	14, 92
Brominated Oils	....	16, 316	Bromoboracic acid	....	2, 281
„ Oil of Turpentine	....	14, 407	Bromobrucine	....	17, 585
Bromine	....	2, 271	Bromocaproic Acid, formation		
„ absorption of volatile			of leucic acid from	....	16, 536
oils by	....	7, 165	Bromocaprylene, Hydrobromate	....	13, 216
„ aqueous solution of	....	2, 276	Bromocarbolic Acid	....	11, 168
„ atomic weight of	....	2, 275	Bromocarbonate of Lead	....	5, 145
„ chloride of	....	2, 350	Bromoehloride of Carbon	....	9, 219
„ -compound of Bis-			<i>Bromochlonaph tune</i> , B., Lau-		
methyl	....	9, 89	rent's	....	14, 82
„ compound of, with			Bromochloronaphthalin, bihydro-		
Chloride of Sulphur	....	2, 350	chlorate of	....	14, 72
„ compounds of, with			Bromocinchonine	....	17, 235
Nuclei	....	7, 212	Bromocinnamic Acid	....	13, 294
„ compound of, with			Bromocodeine	....	17, 37
Starch	....	15, 100	Bromocomenic Acid	....	11, 392
„ electrolysis of aqueous			Brocuminol	....	14, 165
solution of	....	1, 451	Bromocumyl, hydride of	....	14, 165
„ expansion of, by heat			Bromocymene, hydrobromate of	....	14, 214
		1, 227, 230	Bromodichloride of Glyceryl	....	13, 578
„ history of	....	2, 272	Bromoferrocyanide of Ammo-		
„ hydrate of	....	2, 276	nium	....	7, 451
„ hydrochlorate of	....	2, 350	Bromoform	....	7, 339
„ memoirs relating to	....	2, 271	„ existence of, in the		
„ -nuclei	....	7, 170	mother-liquor of the Schö-		
„ -nuclei, aldehydes of	....	7, 194	nebeck salt-spring	....	10, 499
„ in organic compounds	....	7, 5	Bromoguaiaretic Acid	....	17, 245
„ preparation of	....	2, 273	Bromohydrocarotin	....	17, 55
„ properties of	....	2, 275	Bromoleic Acid	....	17, 101
„ replacement of, by Ami-			Bromomethyloselenious Acid	....	10, 492
dogen	....	7, 74	Bromomeconin	....	14, 438
„ replacement of, by Hy-			Bromomercurate of Ammonia	....	6, 82
drogen	....	7, 74	„ Strychnine	....	17, 497
„ replacement of, by Sul-			Bromonaphtalase, <i>see</i> Bromo-		
phur	....	7, 75	naphthalin	....	14, 76

- Bromonaphtase, *see* Bromonaphthalin .... 14, 32
- Bromonaphthalin .... 14, 32
- " chloride of, *see*
- Hydrochlorate of Chlorobromonaphthalin.
- Bromonaphthyl, Bromide, *see*
- Bibromonaphthalin .... 14, 32
- Bromonitroharmin ..... 16, 113
- Bromopalladite of Barium .... 6, 355
- " Manganese .... 6, 356
- " Potassium .... 6, 353
- " Zinc.... 6, 356
- Bromopapaverine .... 17, 261
- Bromophenol .... 11, 168
- Bromophenyl, Benzoate of .... 12, 88
- Bromophenylmesatin .... 13, 83
- Bromophloretin .... 16, 10
- Bromophloroglucin .... 15, 68
- Bromopianyl .... 14, 438
- Bromopicrin .... 11, 217
- Bromoplatinate of Barium .... 6, 327
- " Calcium .... 6, 329
- " Magnesium .... 6, 329
- " Manganese .... 6, 332
- " Potassium .... 6, 322
- " Sodium .... 6, 326
- " Zinc.... 6, 333
- Bromoplatinic Acid .... 6, 292
- Bromopropionic Acid .... 9, 428
- Bromopropylene-bromide .... 13, 552
- Bromopyromeconic Acid .... 10, 445
- Bromosalhydramide .... 12, 348
- Bromosalicene-sulphide.... 12, 287
- Bromosalicylic Acid .... 12, 285
- Bromosalicylous Acid .... 12, 284
- Bromosamide .... 12, 348
- Bromosantonin .... 16, 258
- Bromostannic Acid .... 5, 84
- Bromostannous Acid .... 5, 84
- Bromostearic Acid .... 17, 145
- Bromostearone .... 17, 130
- Bromosulphonaphthalates ... 14, 33
- Bromotellurate of Potassium .... 4, 420
- Bromoterchloronaphthalin .... 14, 78
- Bromoterebene.... 14, 78
- Bromothionessal .... 12, 189
- Bromoxaform .... 9, 190
- Brom-sassafras oil .... 14, 168
- Bromure de Chlorébronaphtine*,
- Laurent's .... 14, 76
- " *Chloroxéthose* .... 9, 219
- Bronaphtase, sub-chloride of, *see*
- Hydrochlorate of Chlorobromonaphthalin.
- Bronaphtin .... 14, 34
- Bronaphtise, chloride of, *see* Bi-
- hydrochlorate of Bichlorobibromonaphthalin .... 14, 76
- Bronaphtose, *see* Quadribromo-
- naphthalin .... 14, 35
- Bronze .... 5, 481
- Bronzite, vanadic .... 3, 404; 4, 81
- Brookite .... 3, 474
- Brown Coal, *see* Lignite.
- " Hæmatite .... 5, 197
- " Iron-ore .... 5, 196
- " Lead-ore .... 5, 149
- " Nitrate of Chromium .... 4, 113
- " Oxide of Chromium .... 4, 140
- " resinous body obtained
- from Acetone .... 9, 13
- " Sulphate of Chromium .... 4, 128
- Brucine .... 17, 572
- " compound of, with Pi-
- crotoxine .... 17, 585
- " compound of, with
- Iodine .... 17, 577
- " decompositions of .... 17, 572
- " hydrate of .... 17, 576
- " preparation of.... 17, 573
- " properties of .... 17, 572
- " reactions of, with Phos-
- phantimonic and Phos-
- phomolybdc Acids ... 17, 581
- " solutions of .... 17, 577, 585
- " and Bibromide of Ethy-
- lene, compounds ob-
- tained from .... 17, 588
- Brucine Salts :
- " Antitartrate .... 17, 583
- " Carbonate .... 17, 578
- " Chlorate .... 17, 580
- " Chloraurate .... 17, 581
- " Chloromercurate 17, 581
- " Chloroplatinate 17, 582
- " Chromate .... 17, 581
- " Dextrotartrate.... 17, 583
- " Hydriodate .... 17, 580
- " Hydrochlorate.... 17, 580
- " Hydroferricyan-
- ate .... 17, 583
- " Hydroferrocyan-
- ate .... 17, 583
- " Hydrofluante .... 17, 581
- " Hydroplatinocy-
- anate .... 17, 583
- " Hydrosulphate.... 17, 587
- " Hydrosulphocoy-
- anate .... 17, 583
- " Hyposulphite .... 17, 579
- " Iodate .... 17, 579
- " Iodomercurate .... 17, 581
- " Nitrate .... 17, 581
- " Perchlorate .... 17, 580
- " Periodate .... 17, 579
- " Phosphate .... 17, 578
- " Sulphate .... 17, 579



Brucine : Tartrate ....	17, 583	Butyl-caproyl ....	10, 564
"    "    with Tartrate		Butyl-hexyl ....	11, 413
of Antimony	17, 584	Butylene ....	10, 66
Brugnatelli's Fulminating		Biacetate ....	13, 556
Silver ....	9, 303	Bromide ....	10, 104
Brunolic Acid ....	15, 163	Chloride ....	10, 103
Brunswick Green ....	5, 441	Hydrate ....	13, 556
Bryoidin ....	17, 397	Butylic Alcohol ....	10, 71
Bryonin ....	17, 541	Alcohol, formation of in	
Bryoretin ....	17, 541	vinous fermentation ....	15, 276
Bucaramanga, earth-resin from	17, 435	Ether ....	10, 69
Bucholzian circuit ....	1, 397	Glycol....	13, 556
Bucholzite ....	3, 414	Mercaptan ....	10, 99
Buck-bean, second body obtained		Urethane ....	10, 148
from ....	16, 32	Butylomercaptides ....	10, 100
preparation of Meny-		Butyrate of Baryta ....	10, 555
anthin from ....	16, 30	Potash ....	10, 554
Buffalo-horn, composition of ....	18, 348	Soda ....	10, 554
Bunsen's battery ....	1, 423	Butyracetic Acid ....	10, 552 ; 13, 560
Burbot-fat ....	16, 326	Ether ....	10, 556
Burnt Alum ....	3, 321	Butyracetin, Glycolic ....	13, 433
Clay ....	3, 415	Butyral ....	10, 73
<i>Bursera balsamifera</i> , balsam ob-		-ammonia ....	10, 75
tained from ....	17, 394	Butyramide ....	10, 145
<i>gummifera</i> or <i>acumi-</i>		Butyranilide ....	11, 316
<i>nata</i> , resin of ....	17, 404	Butyrate of Allyl ....	13, 545
<i>gummifera</i> , gomart-resin		Ammonia ....	10, 84
obtained from ....	17, 415	Aniline ....	11, 263
Butamyl ....	11, 5	Baryta ....	10, 85
<i>Butea frondosa</i> , oil from the seeds		Butyric ....	10, 88
of ....	17, 94	Cetyl ....	16, 379
Butter of Antimony ....	4, 365	Cholesteryl ....	18, 118
cow's milk ....	16, 387	Cinchonidine ....	17, 227
"    "    caprylic		Copper ....	10, 87
acid in ....	13, 190	Ethyl ....	10, 91
cow's milk, preparation		Iron ....	10, 87
of butyric acid from	10, 80	Lime ....	10, 86
cow's milk, preparation		Lime and Baryta ....	10, 86
of caproic acid from	11, 415	Lead ....	10, 86
cow's milk, preparation		Magnesia ....	10, 86
of myristic acid from	16, 211	Mercurous ....	10, 88
human milk ....	16, 387	Methyl ....	10, 90
tin ....	5, 89	Picoline ....	11, 271
Butyl ....	10, 67, 563	Potash ....	10, 84
from Boghead cannel coal	13, 386	Silver ....	10, 88
Acetate....	10, 137	Soda ....	10, 85
Bromide ....	10, 101	Stibmethylethylum	13, 503
Carbonate ....	10, 101	Strontia ....	10, 86
Chloride ....	10, 102	Zinc ....	10, 86
Cyanide ....	11, 121	Butyric acid ....	10, 77
Formiate ....	10, 108	separation of, from	
Hydride ....	10, 69	valerianic acid ....	11, 27
Iodide ....	10, 100	Butyric Anhydride ....	10, 88
Nitrate ....	10, 106	Butyrate ....	10, 88
Oxide ....	10, 69	Fermentation ....	7, 98 ; 10, 81
Sulphate ....	10, 105	Butyrin ....	10, 92
Butylamine ....	10, 146	Butyrodulcitan ....	15, 387
Butyl-amyl ....	10, 564	Butyroglucose ....	15, 332
Butylate of Ethyl ....	10, 70	Butyroleic acid ....	16, 365

Butyrolimnodic acid, <i>see</i> Bog-butter.				Butyryl, Chloride ....	10, 139
Butyromannitans ....	15, 375			Buxine....	17, 173
Butyrone ....	10, 96			Byssolite ....	3, 407
Butyronitrile ....	10, 149			Byssus of Acephalæ ....	18, 372
<i>Butyrum Antimonii</i> ....	4, 365			<i>Byssus phosphorea</i> , emission of light by ....	1, 188

## C.

Cacao-beans, preparation of Theobromine from ....	12, 471			Cadmia Hydrochlorate ....	5, 60
Cacao-butter ....	16, 387			„ Hypophosphite ....	5, 56
„ -red ....	16, 530			„ Hyposulphate....	5, 58
Cacodyl ....	9, 316			„ Iodate....	5, 59
„ Bromide ....	9, 341			„ Isobiglycolethylenate ....	15, 236
„ Chloride ....	9, 343			„ Kinate ....	16, 230
Cacodylic Chloride, Cacodylate of? ....	9, 346			„ Lactate ....	11, 489
Cacodyl, Chloride, hydrated ....	9, 345			„ Metaphosphate ....	5, 57
„ Chlorobibromide ....	13, 495			„ Molybdate ....	5, 65
„ Cyanide ....	9, 349			„ Nitrate ....	5, 61
„ Fluoride ....	9, 348			„ Oxalate ....	9, 152; 13, 525
„ Iodide ....	9, 339			„ Oxide ....	5, 54
„ Oxide....	9, 320; 13, 495			„ „ hydrated ....	5, 54
„ Oxybromide ....	9, 341			„ „ with Asparagine	10, 247
„ Oxychloride ....	9, 345			„ Perchlorate ....	5, 60
„ Oxyiodide ....	9, 340			„ Phosphate ....	5, 56
„ Perbromide, basic ....	9, 342			„ Phosphite ....	5, 56
„ Perchloride? ....	9, 346			„ Piperate ....	15, 10
„ „ basic ....	9, 347			„ Pyrophosphate ....	5, 56
„ Selenide ....	9, 339			„ Pyrotartrate ....	11, 94
„ Sulphides ....	9, 332, 334			„ Saccharates ....	11, 520
„ Terechloride ....	13, 494			„ Salts ....	5, 55
„ of Butyric Acid ....	9, 413			„ Selenite ....	5, 59
„ Valerianic Acid ....	11, 125			„ Styphnate ....	11, 233
Cacodylate of Cacodylic Chloride? ....	9, 346			„ Succinate ....	10, 124
Cacodylates, metallic ....	9, 330			„ Sulphate ....	5, 58
Cacodylic Acid....	9, 327			„ Sulphite ....	5, 58
Cacotheline ....	17, 358			„ Sulphovinate ....	8, 425
Cadmammonium Oxalate ....	13, 525			„ Tartrate ....	10, 311
Cadmia....	5, 1			„ Tungstate ....	5, 65
<i>Cadmia fornacum</i> ....	5, 10			„ Valerate ....	11, 34
Cadmia Acetate ....	8, 310			„ Vanadate ....	5, 65
„ Alloxanate ....	10, 166			Cadmio-calcic Hypophosphite ....	5, 64
„ Ammonio-bromate ....	5, 63			„ -potassic Oxalate ....	13, 526
„ Ammonio-hyposulphate ....	5, 61			„ „ Sulphate ....	5, 63
„ Ammonio-sulphate ....	5, 62			„ -sodic Oxalate ....	13, 526
„ Benzoate ....	12, 41			„ -uranic Acetate....	13, 445
„ Borate ....	5, 56			Cadmium ....	5, 52
„ Bromate ....	5, 60			„ Alloys ....	5, 66
„ Carbonate ....	5, 55			„ Amalgam ....	6, 124
„ Chrysammate ....	12, 5			„ Ammonio-bromide ....	5, 62
„ Croconate ....	10, 393			„ Ammonio-chloride ....	5, 63
„ Cinnamate ....	13, 276			„ Ammonio-iodide ....	5, 62
„ Citrate ....	11, 454			„ Ammonio-oxide ....	5, 61
„ Formiate ....	7, 279			„ Ammonio-sulphocyanide ....	8, 87
„ Hydrobromate ....	5, 60			„ Argentocyanide ....	8, 31
				„ Bromide ....	5, 59
				„ Chloride ....	5, 60



Cadmium, Chloride, with Hydrochlorate of Chino- line .... 13, 250	Caffeine with Cyanide of Mer- cury .... 13, 234
„ Chloride, with Pi- perine .... 15, 22	„ Hydrate .... 13, 231
„ Chloride, with Urea 13, 404	„ Hydrochlorate .... 13, 232
„ Chloro-aurate .... 6, 239	„ Nitrate .... 13, 232
„ Chloroplatinate .... 6, 335	„ with Nitrate of Silver 13, 232
„ Cobaltidecyanide .... 7, 495	„ Sulphate .... 13, 231
„ Cuprocyanide .... 8, 7	„ Tannate .... 13, 235
„ Cyanide .... 9, 507; 7, 426	Caffetannic acid .... 15, 501
„ Fluoride .... 5, 61	Cailecedrin .... 18, 218
„ with Fluxes .... 5, 64	Caincetin .... 18, 141, 146
„ Iodide .... 5, 59	Caincin, or Caincic acid 15, 342; 18, 143
„ Manganidecyanide ... 7, 426	Cajeput, oil .... 14, 334, 510
„ Nitride? .... 5, 61	„ oil, oil obtained from ... 16, 151
„ Oxides .... 5, 53	Cajputene .... 14, 510
„ Persulphomolybdate 5, 65	„ Bromide .... 14, 515
„ Phosphide .... 5, 56	„ Chloride .... 14, 514
„ Protoxide .... 5, 54	„ Hydrates .... 14, 512
„ Salts, solubility of, in alcohol .... 8, 270	„ Hydriodates .... 14, 515
„ Silico-fluoride, hy- drated .... 5, 64	„ Hydrochlorates .... 14, 514
„ Suboxide? .... 5, 53	Calamine .... 5, 1
„ Sulphantimoniate .... 5, 66	„ electric .... 1, 320
„ Sulpharseniate .... 5, 66	„ siliceous .... 5, 46
„ Sulpharsenite .... 5, 65	<i>Calamus Draco</i> , resin of ... 17, 387
„ Sulphide .... 5, 57	Calcareous Epidote .... 3, 429
„ Sulphocarbonate .... 5, 58	„ Harmotome .... 3, 446
„ Sulphocyanide .... 8, 87	„ Mesotype .... 3, 438
„ Sulphomolybdate .... 5, 65	„ Uranite .... 4, 191
„ Sulphotellurite .... 5, 66	„ Uran-mica .... 4, 191
„ Sulphotungstate .... 5, 65	Calcination .... 1, 271
admium and Ammonium, chloride of .... 5, 63	Calcio-antimonic Tartrate ... 10, 308
„ and Copper, alloy of 5, 481	„ -chromic Oxalate.... 9, 142
„ and Iron, cyanides of 7, 490	„ -ferric Oxalate .... 9, 160
„ and Lead, cyanide of 7, 428	„ -uranc Acetate .... 13, 444
„ and Mercury, iodide of .... 6, 124	Calcium .... 3, 181
„ and Platinum, alloy of 6, 335	„ Alloys .... 3, 220
„ and Potassium, bro- mide of .... 5, 64	„ Amalgam .... 6, 107
„ and Potassium, chlo- ride of .... 5, 64	„ Argentocyanide .... 8, 31
„ and Potassium, cya- nide of .... 7, 426	„ Bromide .... 3, 204
„ and Potassium, iodide of .... 5, 64	„ Bromide of, with Ammo- nia .... 3, 214
„ and Sodium, chloride of .... 5, 64	„ Bromide of, with Cya- nide of Mercury .... 8, 23
Cadmium-ethyl .... 12, 530	„ Bromoplatinate .... 6, 329
Caffeic acid .... 15, 501	„ Chloride .... 3, 206
Caffeine .... 13, 223	„ Chloride, with Acetate of Lime .... 8, 302
„ with Chloride of Mer- cury .... 13, 233	„ Chloride, Alcoholate of 8, 267
„ Chloroaurate .... 13, 233	„ Chloride, with Ammonia 3, 215
„ Chloroplatinate .... 13, 234	„ Chloride, with Aurate of Lime .... 6, 234
	„ Chloride, with Carbonate of Lime .... 3, 219
	„ Chloride, Chromate of... 4, 154
	„ Chloride, with Cyanide of Mercury .... 8, 23
	„ Chloride, with Lactate of Ethyl .... 11, 497

Calcium Chloride, with Lactate of Lime ....	11, 484	Calcium Sulphotellurite ....	4, 424
„ Chloride, with Oxalate of Lime ....	9, 132	„ Sulphotungstate ....	4, 44
„ Chloride, with Triphosphate of Lime ....	3, 219	„ Sulphovanadate ....	4, 102
„ Chloro-aurate ....	6, 234	„ Thionurate ....	10, 185
„ Chloropalladite ....	6, 355	„ and Copper, Sulphide of ....	5, 463
„ Chloroplatinate ....	6, 329	„ and Gold, Cyanide of ....	8, 42
„ Cyanide ....	7, 417; 12, 495	„ and Iron, Sulphide of ....	5, 274
„ Ferrieyanide ....	7, 483	„ and Hydrogen, Hydrated Selenide of ....	3, 202
„ Ferrocyanide ....	7, 482	„ and Hydrogen, Hydrated Sulphide of ....	3, 197
„ Fluoride ....	3, 212	„ and Mercury, Chloride of ....	6, 108
„ Fluoride of, with Sulphate of Baryta and Chloride of Barium ....	3, 219	„ and Mercury, Iodide of ....	6, 107
„ Fluoride of, with Cupric Sulphate ....	5, 463	„ and Potassium, Ferrocyanide of ....	7, 484
„ Fluoride of, with Sulphate of Lime ....	3, 220	„ and Silicium, Fluoride of ....	3, 393
„ Fluoride of, with Sulphide of Barium ....	3, 218	„ and Silver, Chelidonate of ....	12, 421
„ Fluoride of, with Sulphide of Calcium ....	3, 220	„ and Silver, Chloride of ....	6, 182
„ Fluoboride, hydrated ...	3, 213	„ and Silver, Citrate of ....	11, 461
„ Hydrated Pentasulphide of, with Lime ....	3, 198	„ and Sodium, Sulphide of ....	3, 217
„ Hydrothiosulphocyanide ....	8, 101	„ and Titanium, Fluoride of ....	3, 487
„ Hyposulpharsenite ....	4, 305	„ and Zinc, Cyanide of ....	7, 425
„ Iodide ....	3, 203	Calc-spar ....	3, 186
„ Iodide with Cyanide of Mercury ....	8, 23	Calculation, Stoichiometrical ....	1, 61
„ Mellonide ....	9, 393	Calculi, biliary, consisting of bile-pigments ....	18, 70
„ Nitroprusside ....	8, 133	<i>Calendula officinalis</i> , emission of light by the flowers of ....	1, 187
„ Oxides ....	3, 181	Calendulin ....	18, 219
„ Oxysalts, <i>see</i> Lime-salts.		Calf-fat ....	16, 388
„ Peroxide ....	3, 185	Californin ....	18, 219
„ Phosphide ....	3, 189	<i>Calluna vulgaris</i> , Ericolin in ....	16, 28
„ Platinocyanide....	8, 53; 10, 508	Callutannates ....	15, 515
„ Platino-platinidecyanide ....	8, 53	Calomel ....	6, 45
„ Salts, solubility of, in Alcohol ....	8, 267	<i>Calophyllum inophyllum</i> , oil from the seeds of ....	17, 94
„ Selenides ....	3, 202	<i>Calophyllum inophyllum</i> , Tacamahac resin obtained from ....	17, 430
„ Selenocyanide ....	8, 123	Caloric, <i>see</i> Heat.	
„ Sulphantimoniate ....	4, 389	Calorific tints ....	1, 221
„ Sulpharseniate....	4, 305	Calorimeter, Hare's ....	1, 410
„ Sulpharsenite ....	4, 305	Calotype process, Talbot's ....	1, 176
„ Sulphides ....	3, 196	<i>Calurus auriceps</i> , red pigment of the feathers of ....	18, 419
„ Sulphide of, with Chloride of Calcium ....	3, 219	Calx, <i>Antimonii alba</i> ....	4, 377
„ Sulphide of, with Fluoride of Calcium ....	3, 220	Camel fat ....	16, 388
„ Sulphide of, with Lime ....	3, 219	<i>Camelina</i> , oil of various species of ....	17, 99
„ Sulphocyanide....	8, 85	<i>Camelina sativa</i> , oil from the seeds of ....	16, 315
„ Sulphocyanide of, with Cyanide of Mercury ....	8, 96	Camphene ....	14, 271
„ Sulphomolybdate ....	4, 76	Camphic Acid ....	14, 353
„ Sulphosinapate ....	10, 35	Camphides ....	7, 24
„ Sulphostannate ....	5, 100	Camphilene ....	14, 277
		Camphin ....	15, 448
		Camphol ....	14, 332



Campholene ....	13, 365	water and of dilute acids ....	15, 253, 254, 537
Campholic Acid ....	14, 453	Cane-sugar, alteration of optical	
„ Alcohol ....	14, 332	rotatory power of,	
Camphor ....	14, 338	during vinous fermentation ....	15, 274
„ Artificial ....	14, 265	aqueous solution of ....	15, 282
„ Bromide ....	14, 348	compound of, with borax ....	15, 284
„ Colophene from ....	14, 280	compounds of, with bases ....	15, 283
„ non-rotatory....	14, 350	compounds of, with cupric oxide ....	15, 290
„ rotation of, on water	14, 341	compounds of, with iron oxides ....	15, 290
„ of Bitter Almond Oil	12, 173	compounds of, with sodium chloride ....	15, 283
„ <i>Buphtalmum maritimum</i> ....	14, 362	compounds of, with water ....	15, 282
„ Cat-thyme ....	14, 364	crystalline form of....	15, 245
„ Cubebs ....	16, 271	decomposition of, by acetate of zinc ....	15, 262
„ <i>Iris florentina</i> ....	14, 372	decomposition of, by acetic acid ....	15, 259
„ Lily of the Valley	14, 378	decomposition of, by dilute acids	15, 254, 537
„ <i>Tanginia madagascariensis</i> ....	18, 242	decomposition of, by ammonia....	15, 260
„ oil, from <i>Laurus Camphora</i> ....	14, 314	decomposition of, by arsenic acid ....	15, 259
„ tree, see <i>Dryobalanops</i> .		decomposition of, by benzoic acid ....	15, 259
Camphoramic Acid ....	14, 481	decomposition of, by bromide of ethyl....	15, 264
Camphoramide ....	14, 482	decomposition of, by bromine ....	15, 252
Camphoranil ....	14, 484	decomposition of, by butyric acid ....	15, 259
Camphoranilic Acid ....	14, 483	decomposition of, by chlorate of potash	15, 257
Camphorates, Metallic ....	14, 458—463	decomposition of, by chloride of lime ....	15, 252
Campho-resin ....	14, 449	decomposition of, by cupric salts ....	15, 263
Camphoric Acid ....	14, 455	decomposition of, by chlorine ....	15, 252
„ „ copulated acids		decomposition of, by diastase ....	15, 264
„ „ produced by ....	7, 227	decomposition of, by dry distillation ....	15, 249
„ „ isomeric modifications of ....	14, 463	decomposition of, by distillation with phosphoric acid ....	15, 257
„ Anhydride ....	14, 467	decomposition of, by emulsin ....	15, 264
„ Ether ....	14, 464	decomposition of, by ferments....	15, 265
„ „ chlorinated ....	14, 466	decomposition of, by ferric chloride ....	15, 262
Camphorimide ....	14, 484		
Camphoroidal Compound, Berzelius and Marcet's ....	7, 360		
Camphors, formation of, from volatile oils by assumption of the elements of water ....	7, 167		
„ mixture of, with organic acids ....	7, 168		
„ solubility of, in bisulphide of carbon ....	7, 168		
Camphoryl ....	13, 342		
Camphrene ....	13, 156		
Camphyl Stearate ....	17, 125		
Canada Turpentine ....	18, 19		
<i>Canarium album</i> , resin of ....	17, 397		
„ <i>commune</i> , oil from the nut of ....	17, 94		
Canaüba-wax ....	18, 158		
Cancrinite ....	3, 452		
<i>Canella alba</i> , oil of ....	14, 210		
Cane-sugar, alteration of optical			
rotatory power of,			
by the action of			

- Cane-sugar, decomposition of, in  
the open fire .... 15, 251  
,, decomposition of, by  
fluoride of boron.... 15, 253  
,, decomposition of, by  
gold chloride .... 15, 264  
,, decomposition of, by  
heat .... 15, 247  
,, decomposition of, by  
strong hydrochloric  
acid .... 15, 257  
,, decomposition of, by  
indigo .... 15, 264  
,, decomposition of, by  
iodine .... 15, 252  
,, decomposition of, by  
lead-oxide .... 15, 262  
,, decomposition of, by  
lime .... 15, 261  
,, decomposition of, by  
mercury salts .... 15, 264  
,, decomposition of, by  
nitrate of bismuth 15, 262  
,, decomposition of, by  
nitrate of cobalt .... 15, 263  
,, decomposition of, by  
nitric acid .... 15, 258  
,, decomposition of, by  
neutral salts .... 15, 256  
,, decomposition of, by  
osmic acid .... 15, 259  
,, decomposition of, by  
oxalic acid .... 15, 259  
,, decomposition of, by  
oxygen or air at  
common tempera-  
tures .... 15, 251  
,, decomposition of, by  
permanganate of  
potash .... 15, 251  
,, decomposition of, by  
peroxides .... 15, 251  
,, decomposition of, by  
platinic chloride.... 15, 264  
,, decomposition of, by  
potash-hydrate .... 15, 260  
,, decomposition of, by  
potassium .... 15, 260  
,, decomposition of, by  
silver salts .... 15, 264  
,, decomposition of, by  
sodium .... 15, 260  
,, decomposition of, by  
stannous and stan-  
nic chlorides .... 15, 262  
,, decomposition of, by  
stearic acid .... 15, 259  
,, decomposition of, by  
succinic acid .... 15, 259
- Cane-sugar, decomposition of, by  
sulphur .... 15, 252  
,, decomposition of, by  
tartaric acid .... 15, 259  
,, decomposition of, by  
vanadic acid .... 15, 259  
,, decomposition of, by  
oil of vitriol .... 15, 257  
,, decomposition of, by  
water .... 15, 253  
,, estimation of .... 15, 243  
,, humous substances  
formed by action  
of acids on 17, 460, 462  
,, lactic fermentation  
of .... 15, 276  
,, memoirs relating to 15, 237  
,, mucous fermentation  
of .... 15, 280  
,, percentage of, in  
aqueous solutions of  
different densities 15, 282  
,, preparation of .... 15, 241  
,, properties of .... 15, 245  
,, refining of.... 15, 242  
,, resolution of, into  
dextro- and lavo-  
glucose in vinous  
fermentation .... 15, 272  
,, solution of, in alcohol 15, 291  
,, sources of.... 15, 237  
,, spontaneous altera-  
tion of aqueous  
solution of .... 15, 254  
,, vinous fermentation  
of .... 16, 265
- Cannabis indica*, resin of .... 17, 447  
,, *sativa*, oil from the  
seeds of .... 16, 312
- Cantharides, fat of .... 16, 388  
Cantharidin .... 14, 469  
Canton's Phosphorus .... 1, 193  
Caoutchin .... 14, 326  
,, Hydriodate .... 14, 329  
,, Hydrobromate and  
Hydrochlorate .... 14, 329  
Caoutchouc .... 17, 343  
,, diffusion of gases  
through .... 1, 25  
,, fossil .... 17, 436  
,, oil.... 17, 347  
,, preparation of ethy-  
lene from .... 8, 164  
,, vulcanised.... 17, 349
- Capacities of bodies for heat .... 1, 238  
Capacity of saturation .... 2, 7; 7, 197  
Capers, preserved, preparation of  
rutin from .... 16, 501  
Capillarity, electricity of ? .... 1, 319

Capillary Pyrites	....	....	5, 370	Carapin	....	....	18, 219
„ Salts	....	....	3, 313	Caraway, crude oil	....	....	14, 416
Capnomor	....	....	15, 161	Carbamic Ether	....	....	9, 274
Caporcianite ?	....	....	3, 440	Carbamide-carbanilide	....	....	11, 303
Capramide	....	....	14, 501	Carbanilamide	....	....	11, 303
Caprate of Ethyl	....	....	14, 489	Carbanilic Acid	....	12, 143, 326	
Caprates, Metallic	....	....	14, 487	Carbanilide	....	....	11, 349
Capric Acid	....	....	14, 485	Carbanilmethylan	....	12, 147	
Caproate of Amyl	....	....	11, 419	Carbazotic gas	....	....	8, 27
„ Ethyl	....	....	11, 419	Carbide of Cerium ?	....	....	3, 264
„ Methyl	....	....	11, 418	„ Chromium and Iron	....	5, 300	
Caproates, Metallic	....	11, 416—418		„ Copper	....	5, 414	
Caproene	....	....	11, 411	„ „ and Iron	....	5, 489	
Caproic Acid	....	....	11, 414	„ Gold and Iron	....	6, 246	
„ Alcohol	....	....	11, 413	„ Iridium	....	6, 375	
„ Anhydride	....	....	11, 421	„ Iron	....	5, 202	
„ Caproate	....	....	11, 421	„ „ and Aluminum	....	5, 276	
„ Ether	....	....	11, 419	„ „ and Cerium	....	5, 274	
Caprone	....	....	11, 420	„ „ and Glucinum	....	5, 275	
Caproyl	....	....	11, 412	„ „ and Tin	....	5, 315	
Capryl	....	....	13, 182	„ „ and Zinc	....	5, 314	
„ Acetate	....	13, 200, 587		„ Lead ?	....	5, 122	
„ Bromide	....	....	13, 194	„ Manganese ?	....	4, 213	
„ Chloride	....	13, 195, 587		„ „ and Iron	....	5, 301	
„ Iodide	....	....	13, 193	„ Nickel	....	5, 366	
„ Margarate	....	....	16, 382	„ „ and Iron	....	5, 396	
„ Nitrate	....	....	13, 198	„ Palladium	....	6, 346	
„ Stearate	....	....	17, 124	„ „ and Iron	....	6, 357	
„ Sulphide	....	....	13, 193	„ Platinum	....	6, 285	
Caprylamine	....	....	13, 219	„ „ and Iron	....	6, 336	
Caprylate of Ethyl	....	....	13, 201	„ Potassium	....	3, 17	
„ Methyl ?	....	....	13, 199	„ Rhodium and Iron	....	6, 368	
Caprylates, Metallic	....	....	13, 192	„ Silicium ?	....	3, 359	
Caprylene	....	....	13, 180	„ „ and Iron	....	5, 288	
„ Chloride	....	....	13, 588	„ „ Silver	....	6, 182	
Caprylic Acid	....	....	13, 190	„ Silver	....	6, 146	
„ Alcohol	....	13, 183, 589		„ „ and Iron	....	6, 196	
„ „ violet substance				„ Tungsten and Iron	....	5, 297	
„ „ derived from		13, 186		„ Zinc ?	....	5, 13	
„ Aldehyde	....	13, 187		„ Zirconium	....	3, 343	
„ „ and Potash,				Carbobenzide	....	12, 85	
„ „ sulphide of		13, 188		Carbobenzoic Acid	....	12, 47	
„ Anhydride	....	13, 202		Carbohumic Acid	....	17, 476	
„ Ether ?	....	13, 183		Carbohydrates	....	15, 65	
Caprylone	....	13, 200		„ $C_{12}H^{11}O^{11}$	15, 193, 217		
Capsicin	....	17, 450		Carbohydrokinonic Acid	....	16, 235	
Capsulæscic Acid	....	16, 151		Carbolate of Amyl	....	12, 272	
<i>Caput mortuum Vitrioli</i>	....	5, 195		„ Ethyl	....	12, 270	
Carajuru	....	17, 19		„ Methyl	....	12, 261	
Caramel, formation of, from cane-				„ Metallic	....	11, 151	
„ sugar	....	15, 248		Carbolic Acid, combination of			
„ Mitscherlich's	....	15, 336		„ with water	....	11, 149	
Caramelane	....	15, 291, 539		„ decomposition of	....	11, 145	
Caramelene	....	15, 292		„ hydrated	....	11, 149	
Caramelin	....	15, 293, 540		„ preparation of,			
Caranna	....	17, 404		„ from beech-tar	11, 140		
Carapa-bark, bitter alkaloïd				„ preparation of,			
„ of	....	17, 314		„ from beech-wood			
„ -oil	....	16, 388		„ vinegar	....	11, 139	



- |                                                                                                                    |         |                                                                      |             |
|--------------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------|-------------|
| Carbolic Acid, preparation of,<br>from coal-tar ....                                                               | 11, 143 | Carbon, Chlorosulphide of ....                                       | 2, 335      |
| „ preparation of<br>picric acid from ....                                                                          | 11, 212 | „ Dichloride ....                                                    | 8, 160      |
| „ properties of ....                                                                                               | 11, 144 | „ Dichloride, solubility of,<br>in alcohol ....                      | 8, 273      |
| „ sources and forma-<br>tion of ....                                                                               | 11, 139 | „ effect of, on the boiling<br>points of organic com-<br>pounds .... | 7, 57       |
| Carbomethylic Acid ....                                                                                            | 7, 290  | „ estimation of, in organic<br>compounds ....                        | 7, 86       |
| Carbon ....                                                                                                        | 2, 81   | „ Perchloride, sulphite of                                           | 2, 337      |
| „ amount of, in bar-iron....                                                                                       | 5, 205  | „ Phosphide of? ....                                                 | 2, 149      |
| „ „ various<br>kinds of                                                                                            |         | „ Phosphuretted sulphide<br>of ....                                  | 2, 219      |
| „ „ pig-iron                                                                                                       | 5, 213  | „ Protobromide ....                                                  | 7, 341      |
| „ „ steel ....                                                                                                     | 5, 207  | „ Protochloride ....                                                 | 9, 215      |
| „ -atoms, increase in the<br>number of, in organic<br>compounds by artificial<br>modes of transforma-<br>tion .... | 7, 43   | „ Protochloride, sulphite<br>of ....                                 | 2, 339      |
| „ atomic weight of ....                                                                                            | 2, 87   | „ Sesquichloride ....                                                | 9, 220      |
| „ in cast-iron, formation of<br>organic compounds from                                                             | 7, 39   | „ Sulphide ....                                                      | 2, 200      |
| „ history of ....                                                                                                  | 2, 81   | „ Sulphide with Piperidine                                           | 15, 15      |
| „ memoirs relating to ....                                                                                         | 2, 81   | „ Sulphite of perchloride<br>of ....                                 | 7, 350, 354 |
| „ numerical proportions of<br>combinations of, with<br>hydrogen ....                                               | 7, 154  | „ Sulphuretted bisulphide<br>of ....                                 | 2, 205      |
| „ inorganic compounds, not<br>replaceable by other ele-<br>ments....                                               | 7, 71   | „ and Barium, sulphide of                                            | 3, 153      |
| „ the only element essen-<br>tial to organic com-<br>pounds ....                                                   | 7, 4    | „ and Calcium, sulphide of                                           | 3, 202      |
| „ preparation of ....                                                                                              | 2, 83   | „ and Lithium, sulphide of                                           | 3, 129      |
| „ properties of ....                                                                                               | 2, 85   | „ and Magnesium, sulphide<br>of ....                                 | 3, 239      |
| „ sources of ....                                                                                                  | 2, 82   | „ and Manganese, sulphide<br>of ....                                 | 4, 225      |
| „ Bichloride ....                                                                                                  | 7, 355  | „ and Potassium, sulphide of                                         | 3, 42       |
| „ Bichloride, preparation of<br>chloroform from ....                                                               | 13, 400 | „ and Sodium, sulphide of                                            | 3, 104      |
| „ Bisulphide ....                                                                                                  | 2, 200  | „ and Strontium, sulphide of                                         | 3, 175      |
| „ „ copulated acids<br>produced by,<br>with alcohols                                                               | 7, 224  | Carbonaphthalide ....                                                | 14, 123     |
| „ „ mixture of, with<br>volatile oils                                                                              | 7, 168  | Carbonate of Allyl ....                                              | 13, 543     |
| „ „ formation of<br>organic com-<br>pounds from                                                                    | 7, 40   | „ Alumina ....                                                       | 3, 308      |
| „ „ ioduretted ....                                                                                                | 2, 268  | „ Alumina and Am-<br>monia ....                                      | 3, 318      |
| „ „ vapour-tension<br>of ....                                                                                      | 1, 262  | „ Alumina and Pot-<br>ash ....                                       | 3, 321      |
| „ Bromide ....                                                                                                     | 7, 341  | Carbonates of Ammonia ....                                           | 2, 430      |
| „ „ solid ....                                                                                                     | 7, 344  | Carbonate of Ammonia, electro-<br>lysis of ....                      | 1, 460      |
| „ Bromochloride ....                                                                                               | 9, 219  | „ Ammonio-chloride<br>of Sulphur ....                                | 2, 486      |
| „ Chlorides 7, 355; 8, 160;<br>9, 215, 220                                                                         |         | „ Amyl ....                                                          | 11, 45, 114 |
| „ „ formation of<br>oxalic acid from                                                                               | 13, 514 | „ Amylamine ....                                                     | 11, 106     |
| „ Chloride, sulphide of ....                                                                                       | 7, 357  | „ Atropine....                                                       | 16, 454     |
|                                                                                                                    |         | Carbonates of Baryta ....                                            | 3, 138      |
|                                                                                                                    |         | Carbonate of Baryta and Am-<br>monia ....                            | 3, 163      |
|                                                                                                                    |         | „ Baryta and Potash                                                  | 3, 164      |
|                                                                                                                    |         | „ Bichloride of Sul-<br>phur ....                                    | 2, 337      |
|                                                                                                                    |         | „ Bismuth-oxide ....                                                 | 4, 433      |
|                                                                                                                    |         | „ Brucine ....                                                       | 17, 578     |
|                                                                                                                    |         | „ Butyl ....                                                         | 10, 104     |
|                                                                                                                    |         | „ Cadmic oxide ....                                                  | 5, 55       |

Carbonate of Ceric oxide ....	3, 264	Carbonate of Lead-oxide and Soda	5, 162
„ Ceric oxide and		„ and Sulphate of Lead-	
„ Potash ....	3, 272	oxide ....	5, 138
„ Cerous oxide ....	3, 264	„ of Lime ....	3, 185
„ Cerous oxide and		„ Lime with Ammo-	
„ Ammonia ....	3, 272	nia ? ....	3, 214
„ Cerous oxide and		„ Lime and Baryta	3, 218
„ Lime ....	3, 274	„ Lime with Chloride	
„ Cerous oxide and		of Calcium ....	3, 219
„ Potash ....	3, 272	„ Lime and Soda ....	3, 215
„ Cinchonine ....	17, 206	„ Lime and Strontia	3, 319
„ Chromic oxide ....	4, 122	„ Lime with Sul-	
„ Chromic oxide and		phate of Soda ....	3, 217
„ Ammonia ....	4, 142	„ Lithia ....	3, 127
„ Chromic oxide and		„ Magnesia ....	3, 226
„ Potash ....	4, 147	„ Magnesia and Am-	
„ Chromous oxide ....	4, 121	monia ....	3, 244
„ Cobalt-oxide ....	5, 328	„ Magnesia and Lime	3, 253
„ Cobalt-oxide and		„ Magnesia and Pot-	
„ Ammonia ....	5, 339	ash ....	3, 249
„ Cobalt-oxide and		„ Magnesia and Soda	3, 251
„ Potash ....	5, 343	„ Manganous oxide	4, 213
„ Cobalt-oxide and		„ Manganous oxide	
„ Soda ....	5, 344	and Ammonia ....	4, 231
„ Codeine ....	17, 32	„ Mercurialine ....	18, 200
„ Cupric oxide ....	5, 414	„ Mercuric oxide ....	6, 15
„ Cupric oxide with		„ Mercurous oxide	6, 15
„ Ammonia ....	5, 448	„ Methylamine ....	7, 316
„ Cupric oxide and		„ Methyloplumbethyl	9, 107
„ Potash ....	5, 458	„ Molybdic oxide	
„ Cupric oxide and		and Ammonia ....	4, 68
„ Soda ....	5, 461	„ Molybdic oxide	
„ Cupric oxide and		and Potash ....	6, 70
„ Zinc-oxide ....	5, 480	„ Molybdic oxide	
„ Ethyl ....	8, 392	and Soda ....	4, 73
„ Ethylamine ....	9, 56	„ Molybdous oxide	
„ Ethylmethylconine	13, 173	and Ammonia ....	4, 68
„ Ethylomethylic ....	8, 393	„ Morphine ....	16, 430
„ Ethylstrychnine ....	17, 511	„ Neurine ....	18, 381
„ Ferric oxide ? ....	5, 222	„ Nickel-oxide ....	5, 366
„ Ferric oxide and		„ Nickel-oxide and	
„ Ammonia ....	5, 260	Ammonia ....	5, 379
„ Ferric oxide and		„ Papaverine ....	17, 258
„ Potash ....	5, 268	Carbonates of Potash ....	3, 18
„ Ferric oxide and		Carbonate of Potash, Berthol-	
„ Soda ....	5, 272	let's neutral ....	3, 22
„ Ferrous oxide ....	5, 219	„ Potash and Char-	
„ Ferrous oxide and		coal, formation	
„ Magnesia ....	5, 274	of organic com-	
„ Glucina ....	3, 296	pounds in the	
„ Glucina and Am-		preparation of	
„ monia ....	3, 300	potassium from	7, 41
„ Glucina and Pot-		„ Potash, with	
„ ash ....	3, 301	Chloride of Po-	
„ Glucina and Soda	3, 302	tassium ....	3, 71
„ Harmaline ....	16, 117	„ Potash with Fluo-	
„ Lanthanum ....	3, 278	ride of Calcium	3, 215
Carbonates of Lead-oxide ....	5, 122	„ Potash with Nio-	
Carbonate of Lead-oxide and Lime	5, 164	biate of Potash	4, 18

Carbonate of Potash with Sulphate of Potash	4, 150	Carbonate of Yttria and Potash	3, 290
„ Protochloride of Sulphur ....	2, 339	„ Yttria and Soda....	3, 290
„ Quinine....	17, 275	Carbonates of Zinc-oxide ....	5, 13
„ Silica and Potash	3, 373	Carbonate of Zinc-oxide and Ammonia ....	5, 36
„ Silica and Soda....	3, 386	„ Zinc-oxide and Potash ....	5, 43
„ Silver-oxide ....	6, 146	„ Zinc-oxide and Soda ....	5, 45
„ Silver-oxide and Potash ....	6, 178	„ Zirconia ....	3, 344
Carbonates of Soda ....	3, 77	„ Zirconia and Ammonia ....	3, 347
Carbonate of Soda, formation of humous substance by heating, with phosphorus ....	17, 461	„ Zirconia and Potash ....	3, 347
„ Soda and Potash	3, 119	Carbonates, general properties of,	2, 94
„ Soda with Silicate of Ferric oxide	5, 283	„ compounds of, with double Silicates ....	3, 452
„ Stannethyl ....	9, 97	„ and Sulphites, analogy between ....	2, 173
„ Stibethyl ....	10, 525	Carbonic acid ....	2, 89
„ Stibmethylum ....	7, 324	„ absorption of, by liquid volatile oils	7, 167
„ Stibmethylethyl-ium ....	13, 501	„ copulated acids produced by, with wood-spirit and alcohol ....	7, 224
„ Strontia ....	3, 170	„ decomposition of, by the green parts of plants under the influence of light ....	1, 172
„ Strychnine ....	17, 490	„ formation of, in fermentation ....	7, 97
„ Sulphethyl ....	8, 445	„ formation of, by putrefaction of damp wood in confined air ....	7, 94
„ Thorina....	3, 332	„ formation of, in vinous fermentation ....	15, 265
„ Thorina and Ammonia....	3, 335	„ freezing of, by the cold produced by its own sudden vaporization ....	1, 273
„ Thorina and Potash ....	3, 335	„ gas, maximum tension of, at different temperatures	1, 261; 2, 503
„ Titanic oxide and Ammonia ....	3, 483	„ gas, presence of, in the air ....	2, 409
„ Titanic oxide and Potash ....	3, 485	„ solution of, in alcohol ....	8, 263
„ Titanic oxide and Soda ....	3, 486	Carbonic Ether ....	8, 392
„ Uranic oxide ....	4, 170	Carbonic Oxide ....	2, 87
„ Uranic oxide and Ammonia ....	4, 184	„ Oxide, absorption of by liquid volatile oils	7, 167
„ Uranic oxide and Lime ....	4, 190	„ Oxide, compound of, with hæmoglobin ....	18, 392
„ Uranic oxide and Potash ....	4, 187	„ Oxide, effect of, in re-	
„ Uranic oxide and Soda ....	4, 189		
„ Uranoso-uranic oxide ....	4, 170		
„ Uranous oxide and Ammonia....	4, 184		
„ Vanadic oxide and Ammonia ....	4, 98		
„ Vanadic oxide and Potash ....	4, 100		
„ Veratrine ....	18, 182		
„ Vinomethylic ....	8, 393		
„ Yttria ....	3, 286		
„ Yttria and Ammonia ....	3, 290		



- tarding the combustion of detonating gas in contact with platinum and other metals .... 2, 53
- Carbonic Oxide, heat of combustion of .... 1, 294
- „ Oxide, production of formic acid from .... 10, 490
- „ Oxide, solution of, in alcohol .... 8, 263
- Carbonous acid gas, *see* Carbonic Oxide.
- Carbonisation, imperfect formation of humus by .... 17, 460
- Carbothiacetonine .... 9, 14
- Carbostyryl .... 13, 302
- Carbosulphide of Copper? .... 5, 430
- Carbothiacetonine .... 13, 379
- Carbothialdine .... 9, 288
- Carboulmic Acid .... 17, 476
- Carbonyl Chloride, compound of, with cyanide of ethyl .... 13, 457
- Carbovinic Acid .... 8, 394
- Carboxide of Potassium .... 10, 395
- Carburetted Hydrogen, Light .... 7, 249
- Carbyl, Sulphate of .... 8, 412
- Cardamom oil .... 14, 362
- Cardol .... 17, 517
- Carminamide .... 16, 208
- Carminate of Ethyl? .... 16, 209
- Carminci Acid .... 16, 205
- „ acids, Schützenberger's .... 16, 207
- Carminium, *see* Carminic Acid.
- Carmufellic Acid .... 14, 208
- Carnations, decoloration of tinture of, under blue glass in sunshine .... 7, 96
- Carnaüba Wax .... 18, 159
- Carolina Turpentine .... 18, 19
- Carotin .... 17, 14
- Carrot Oil .... 14, 362
- Carthamin .... 16, 202
- Carthusian powder .... 4, 340
- Cartilage-gelatin .... 18, 359
- Carucru .... 17, 18
- Carvacrol .... 14, 414
- Carvene .... 14, 283
- Carvol .... 14, 414
- „ Hydrosulphate of .... 14, 417
- Caryophyllin .... 14, 187
- Cascarilla bitter .... 18, 219
- „ hard resin of .... 17, 447
- „ oil .... 14, 363
- Casein, artificial digestion of .... 18, 338
- „ chloroplatinate of .... 18, 316
- „ coagulation of, by rennet .... 18, 312
- Casein, combinations of, with acids .... 18, 313
- „ combinations of, with bases .... 18, 315
- „ compound of, with platinum cyanide .... 18, 318
- „ of gluten .... 18, 438
- „ lactic fermentation induced by .... 7, 99
- „ occurrence of .... 18, 307
- „ oxidation of .... 18, 310
- „ preparation of .... 18, 308
- „ preparation of leucine from .... 11, 428
- „ preparation of tyrosine from .... 13, 358
- „ properties and composition of .... 18, 309
- „ putrefaction of 7, 104; 18, 312
- „ reaction of, with acetic acid .... 18, 318
- „ reaction of, with chlorine 18, 311
- „ reactions of, with mineral acids .... 18, 311
- „ vegetable .... 18, 423
- „ -potash .... 18, 315
- „ -soda .... 18, 315
- Cassia, oil of .... 13, 258
- „ oil, stearoptene of .... 17, 395
- Cashew-nut oil .... 17, 94
- Cassel-yellow .... 5, 147
- Cassuvium pomiferum*, oil of the almonds of .... 17, 94
- Cast-iron or Pig-iron .... 5, 210
- „ action of acids on .... 5, 215
- „ analyses of .... 5, 212
- „ effect of heating in the air .... 5, 215
- „ humous substance remaining on dissolving it in nitric acid .... 17, 461
- „ saturated .... 5, 219
- Cast-steel .... 5, 206
- Castor and Pollux .... 3, 448
- Castoreum Oil .... 14, 364
- Castorin .... 18, 121
- Castoreum Camphor .... 18, 121
- Castor Oil .... 17, 137
- „ Oil, preparation of octylic alcohol from .... 13, 184
- „ Oil, preparation of ricinoleic acid from .... 17, 131
- „ Oil, spongy residue from the distillation of .... 17, 141
- Catalysis .... 1, 114
- Cathartic Acid .... 18, 241
- Cathartomammite .... 18, 241
- Catechin .... 12, 387
- „ Hydrated .... 12, 390

- Catechutannic Acid .... 15, 515  
 Cathode .... 1, 431  
*Catinga cœrulea*, violet pigment  
   of the feathers of .... 18, 419  
 Cations .... 1, 431; 1, 434  
 Cat-thyme, camphor of.... 14, 364  
 Caustic alkalis .... 3, 3  
   " ley .... 3, 76  
   " salt, Caustic solution 3, 14  
 Cautchene .... 10, 21  
 Cavendish's apparatus for ex-  
   plosion of oxygen and hydrogen 2, 45  
 Cavendish's, chemical dis-  
   coveries .... 1, 5  
 Cedar-camphor.... 16, 270  
 Cedrene .... 16, 269  
 Cedriret .... 15, 160  
 Celery, existence of Apiin in .... 16, 94  
   " oil .... 14, 364  
 Cellulose, action of potash on .... 15, 139  
   " " soda on .... 15, 141  
   " combination of, with  
     alkalis .... 16, 141  
   " combination of, with  
     copper .... 15, 142  
   " combination of, with  
     lead .... 15, 144  
   " combination of, with  
     nickel .... 15, 144  
   " combination of, with  
     water .... 15, 141  
   " composition of .... 15, 129  
   " decomposition of, by  
     action of moist air 15, 133  
   " decomposition of, by  
     ammonia .... 15, 139  
   " decomposition of, by  
     benzoic acid .... 15, 139  
   " decomposition of, by  
     bichloride of tin .... 15, 140  
   " decomposition of, by  
     bromine .... 15, 537  
   " decomposition of, by  
     heating with bromine  
       and water.... 15, 537  
   " decomposition of, by  
     butyric acid .... 15, 139  
   " decomposition of, by  
     chloride of zinc .... 15, 140  
   " decomposition of, by  
     chlorine .... 15, 134  
   " decomposition of, by  
     combustion .... 15, 133  
   " decomposition of, by  
     dry distillation .... 15, 133  
   " decomposition of, by  
     fermentation .... 15, 140  
   " decomposition of, by  
     fluoride of boron .... 15, 139  
 Cellulose, decomposition of, by  
   hydrochloric acid .... 15, 139  
   " decomposition of, by  
     hypochlorites .... 15, 134  
   " decomposition of, by  
     iodine .... 15, 134  
   " decomposition of, by  
     nitric acid.... 15, 135  
   " decomposition of, by  
     peroxide of man-  
       ganese and sulphuric  
       acid .... 15, 134  
   " decomposition of, by  
     potash .... 15, 139  
   " decomposition of, by  
     stearic acid .... 15, 139  
   " decomposition of, by  
     sulphuric acid .... 15, 136  
   " formation of dextro-  
     glucose from .... 15, 309  
   " memoirs relating to 15, 123  
   " nitro-derivatives of... 15, 166  
   " occurrence of, in the  
     animal kingdom .... 15, 126  
   " preparation of .... 15, 126  
   " properties of .... 15, 128  
   " reaction of, in the  
     indigo-vat .... 15, 144  
   " solubility of, in aqueous  
     cuprammonia .... 15, 142  
   " sources of .... 15, 124  
 Cell-walls of plants, constitution  
   of .... 15, 125  
 Cement, pure or fat lime with .... 3, 390  
   " Roman .... 3, 391  
 Cementation .... 1, 36  
   " -steel .... 5, 206  
*Centaurea benedicta*, resin of .... 17, 447  
 Centaurin, *see* Cnicin.  
 Centigrade into Fahrenheit de-  
   grees, table for  
   converting .... 2, 500  
   " Reaumur, and Fah-  
   renheit scales, com-  
   parative table of .... 1, 237  
*Cephalis Ipecacuanha*, tannic  
   acid from the root of .... 15, 523  
*Cera de Palma* .... 17, 405  
*Ceradia furcata*, resin of .... 17, 404  
 Ceraïn, formation of, from cerin 18, 135  
 Ceratophyllin .... 15, 535  
   " .... 16, 297  
 Cerealin .... 18, 457  
 Cerebrin .... 16, 479  
 Ceric Acid .... 18, 160  
   " Carbonate .... 3, 264  
   " Croconate .... 10, 392  
   " Nitrate .... 3, 272  
   " Oxalate .... 9, 134

Ceric Oxide ....	3, 263	Cerous Disilicate ....	3, 408
„ Rhodizonate ....	10, 402	„ Formiate ....	7, 278
„ Selenites....	3, 269	„ Hyposulpharsenite ....	4, 309
„ Sulpharseniate ....	4, 309	„ Hyposulphate ....	3, 268
„ Sulphates ....	3, 269	„ Molybdate ....	4, 77
„ Sulphomolybdate ....	4, 77	„ Nitrate ....	3, 271
Cerico-potassic Carbonate ....	3, 272	„ Oxalate ....	9, 133
„ Sulphate ....	3, 273	„ Oxide ....	3, 257
Cerin ....	18, 159	„ „ hydrated ....	3, 257
„ decomposition of, by boiling with potash-ley ....	18, 135	„ and Ceric Oxide with Fluxes ....	3, 273
Cerine ....	3, 427	„ Persulphomolybdates ....	4, 77
Cerinin ....	17, 443	„ Phosphate ....	3, 265
Cerite ....	3, 408	„ Racemate ....	10, 355
„ preparation of cerium from ....	3, 257	„ Selenites ....	3, 269
Cerium ....	3, 255	„ Succinate ....	10, 122
„ Carbide ? ....	3, 264	„ Sulpharseniate ....	4, 309
„ Chloride ....	3, 270	„ Sulpharsenite ....	4, 309
„ Cyanide ....	7, 417	„ Sulphate ....	3, 268
„ Ferrocyanide ....	7, 486	„ Sulphite ....	3, 267
„ Fluorides ....	3, 271	„ Sulphomolybdate ....	4, 77
„ Iodide ? ....	3, 270	„ Sulphotellurite ....	4, 425
„ Oxides ....	3, 257	„ Tartrate ....	10, 291
„ Oxychloride ....	3, 271	Cerotate of Cerotyl ....	18, 139
„ Oxysulphide ....	3, 267	„ Ethyl ....	18, 138
„ Phosphide ....	3, 265	Cerotates, metallic ....	18, 137
„ Salts, solubility of, in alcohol ....	8, 268	Cerotene ....	18, 133
„ Selenide ....	3, 269	Cerotic Acid ....	18, 135
„ separation of, from lanthanum and didymium ....	3, 260, 275	Cerotin ....	18, 133
„ Sesquichloride, hydrated ....	3, 271	Cerotinone ....	18, 138
„ Silicate of Protoxide of, with silicate of alumina ....	3, 420	Cerotylic Alcohol ....	18, 133
„ Sulphides ....	3, 267	„ Cerotate ....	18, 139
„ Sulphotungstate ....	4, 45	Cerotyl-sulphuric Acid....	18, 137
„ and Iron, carbide of ....	5, 274	Ceroxylin or Cerosilin ....	18, 161
„ and Mercury, chloride of ....	6, 109	<i>Ceroxylon Andicola</i> ....	17, 405
Ceropates ....	18, 16	<i>Cerussa Antimonii</i> ....	4, 377
Cerosic Acid ....	18, 81, 82	Cetic Acid ....	16, 365
Ceroso-ammonic Carbonate ....	3, 272	Cetin ....	16, 347
„ Sulphate ....	3, 272	Cetrarates ....	17, 24
Ceroso-calcic Carbonate ....	3, 274	Cetraric Acid ....	17, 21
Ceroso-ceric Oxide ....	3, 262	Cetrarin-blue ....	17, 23
„ Sulphate ....	3, 269	Cetyl Acetate ....	16, 375
Ceroso-potassic Carbonate ....	3, 272	„ Benzoate.. ....	16, 381
„ Sulphate ....	3, 272	„ Bromide ....	16, 369
Ceroso-sodic Sulphate ....	3, 273	„ Butyrate....	16, 379
Cerous Acetate ....	8, 303	„ Chloride ....	16, 369
„ Arseniate ....	4, 308	„ Cyanide ....	16, 374
„ Benzoate ....	12, 40	„ „ preparation of margaric acid from ....	16, 476
„ Bromate ....	3, 270	„ Iodide ....	16, 368
„ Bromide ....	3, 270	„ Oxide ....	16, 342
„ Carbonate ....	3, 264	„ Stearate ....	17, 128
„ Chromates ....	4, 154	„ Succinate ....	16, 379
„ Cinnamates ....	13, 275	„ Sulphide ....	16, 367
„ Citrates ....	11, 452	„ Sulphydrate ....	16, 367
		„ -acetic Ether ....	16, 375
		Cetylaniline ....	16, 384
		Cetyl-benzoic Ether ....	36, 381
		„ -butyric Ether ....	16, 379



- |                                         |      |      |         |                                        |                      |      |          |
|-----------------------------------------|------|------|---------|----------------------------------------|----------------------|------|----------|
| Cetylene                                | .... | .... | 16, 341 | Chelidonate of Soda                    | ....                 | .... | 12, 416  |
| „ Chlorohydrate                         | .... | .... | 16, 373 | „ Strontia                             | ....                 | .... | 12, 417  |
| „ -sulphuric Acid                       | .... | .... | 16, 370 | Chelidonic Acid                        | ....                 | .... | 12, 413  |
| Cetylic Alcohol                         | .... | .... | 16, 344 | Chelodinine                            | ....                 | .... | 17, 164  |
| „ Aldehyde                              | .... | .... | 16, 349 | <i>Chelidonium majus</i> , ferment-oil |                      |      |          |
| „ Chlorohydrin                          | .... | .... | 16, 373 | of                                     | ....                 | .... | 14, 405  |
| „ Ether                                 | .... | .... | 16, 342 | <i>Chelidonium majus</i> , preparation |                      |      |          |
| „ Mercaptan                             | .... | .... | 16, 367 | of Chelerythrine from the              |                      |      |          |
| Cetyl-succinic Ether                    | .... | .... | 16, 979 | roots of                               | ....                 | .... | 17, 157  |
| „ -sulphuric Acid, <i>see</i> Cetyl-    |      |      |         | Chelidoxanthine                        | ....                 | .... | 17, 163  |
| lene-sulphuric acid.                    |      |      |         | Chemical action of Light, me-          |                      |      |          |
| Cetyl-xanthic Acid                      | .... | .... | 16, 371 | moirs relating to                      | ....                 | .... | 1, 161   |
| Cevadic Acid                            | .... | .... | 18, 186 | „ attraction                           | ....                 | .... | 1, 33    |
| Chabasite                               | .... | .... | 3, 440  | „ combination, <i>see</i> Com-         |                      |      |          |
| Chærophylline                           | .... | .... | 18, 189 | „ combination.                         |                      |      |          |
| <i>Chærophyllum sylvestre</i> , ferment |      |      |         | „ compounds, <i>see</i> Com-           |                      |      |          |
| oil of                                  | .... | .... | 14, 405 | „ compounds.                           |                      |      |          |
| Chalcedony                              | .... | .... | 3, 352  | „ co-operation, influence              |                      |      |          |
| Chalk                                   | .... | .... | 3, 185  | of, on combination                     | ....                 | .... | 1, 37    |
| Chalkolite                              | .... | .... | 5, 468  | „ decomposition, <i>see</i> De-        |                      |      |          |
| Chamæleon-salt of Zeise                 | .... | .... | 2, 463  | „ decomposition.                       |                      |      |          |
| Chamoisite                              | .... | .... | 5, 284  | „ electricity                          | ....                 | .... | 1, 328   |
| Chamomile, Roman, essential oil         |      |      |         | „ and electro-chemical                 |                      |      |          |
| of                                      | .... | .... | 10, 412 | action, distinction be-                |                      |      |          |
| „ wild, oil of                          | .... | .... | 14, 365 | tween                                  | ....                 | .... | 1, 343   |
| Characteristics of Primary              |      |      |         | „ energy, combination                  |                      |      |          |
| Nuclei                                  | .... | .... | 7, 23   | induced by communi-                    |                      |      |          |
| Charcoal, appearances presented         |      |      |         | cation of                              | ....                 | .... | 1, 38    |
| by, in the voltaic arc                  | .... | .... | 2, 85   | „ energy, decomposition                |                      |      |          |
| „ effect of, in inducing                |      |      |         | induced by communi-                    |                      |      |          |
| the combination of                      |      |      |         | cation of                              | ....                 | .... | 1, 115   |
| oxygen and hydrogen                     | .... | .... | 11, 53  | „ equivalents, doctrine                |                      |      |          |
| „ humous products formed                |      |      |         | of                                     | ....                 | .... | 1, 39—54 |
| from, by the action of                  |      |      |         | „ equivalents, table of                | ....                 | .... | 1, 63    |
| alkalis and of nitric                   |      |      |         | „ equivalents, Wollas-                 |                      |      |          |
| acid                                    | .... | .... | 17, 461 | ton's scale of                         | ....                 | .... | 1, 63    |
| „ preparation of                        | .... | .... | 2, 83   | „ force                                | ....                 | .... | 1, 33    |
| „ „ by dry                              |      |      |         | „ formulæ                              | ....                 | .... | 1, 60    |
| distillation of wood                    | .... | .... | 7, 82   | „ harmonica                            | ....                 | .... | 2, 58    |
| „ production of, by im-                 |      |      |         | „ physiology, subjects                 |                      |      |          |
| perfect combustion of                   |      |      |         | of                                     | ....                 | .... | 7, 1     |
| organic bodies                          | .... | .... | 7, 85   | „ powers of the differ-                |                      |      |          |
| „ from wood                             | .... | .... | 15, 153 | ent rays of the Spec-                  |                      |      |          |
| „ sulphuretted                          | .... | .... | 2, 206  | trum                                   | ....                 | .... | 1, 174   |
| „ -burning                              | .... | .... | 15, 159 | „ proportions, doctrine                |                      |      |          |
| Chelerythrine                           | .... | .... | 17, 156 | of                                     | ....                 | .... | 1, 39—64 |
| „ salts                                 | .... | .... | 17, 159 | „ rays, permeability of                |                      |      |          |
| Chelidonate of Ammonia                  | .... | .... | 12, 415 | different substances                   |                      |      |          |
| „ Baryta                                | .... | .... | 12, 417 | by                                     | ....                 | .... | 1, 174   |
| „ Copper                                | .... | .... | 12, 420 | „ relations of compounds               | ....                 | .... | 1, 96    |
| „ Ferric oxide                          | .... | .... | 12, 420 | „ relations of light                   | ....                 | .... | 1, 165   |
| „ Ferrous oxide                         | .... | .... | 12, 420 | „ spectrum                             | ....                 | .... | 1, 180   |
| „ Lead                                  | .... | .... | 12, 419 | „ symbols                              | 1, 50, 66, and 68—72 |      |          |
| „ Lime                                  | .... | .... | 12, 417 | „ theory of galvanic                   |                      |      |          |
| „ „ and Potash                          | .... | .... | 12, 418 | action                                 | ....                 | .... | 1, 512   |
| „ Magnesia                              | .... | .... | 12, 418 | „ weights                              | ....                 | .... | 1, 42    |
| „ Potash                                | .... | .... | 12, 416 | Chemistry, an art as well as a         |                      |      |          |
| „ Silver                                | .... | .... | 12, 421 | science                                | ....                 | .... | 1, 2     |
| „ „ and Calcium                         | .... | .... | 12, 421 | „ branches of                          | ....                 | .... | 1, 2     |

Chemistry, definition of	....	1,	1		with Chloride of Cad-		
„ formation of first sys-					mium	....	13, 250
„ tem of	....	1,	4	Chinoline, Hydrochlorate of, with			
„ historical survey of	....	1,	2	Chloride of Uranyl	....	13,	249
„ Organic, its subdivi-				„ Monohydrate	....	13,	247
„ sions	....	7,	1	„ Nitrate	....	13,	249
„ special	....	1,	160	„ Oxalate	....	13,	253
Chenocholic acid	....	18,	130	„ Picrate	....	13,	251
Chenopodin	....	18,	220	„ production of, by dis-			
<i>Chenopodium ambrosioides</i> , oil				tilling quinine with			
of	....	14,	366	potash	....	17,	273
Cherries, preparation of Oxalic				„ Sulphate	....	13,	248
acid from	....	10,	210	„ terhydrated	....	13,	248
„ colouring matter of	....	16,	529	Chinone	....	11,	158
Cherry-water	....	12,	29	Chiococcic acid	....	18,	142
Chevreul's artificial bitter,				Chitin	....	15,	342, 414
with minimum of				„ coloration of blowpipe			
acid	....	12,	306	flame by	....	18,	257
„ saponification experi-				Chlonaphthalane	....	14,	64
ments	....	7,	234	<i>Chlonaphthalase</i> , A. Laurent's	....	14,	63
„ volatile acid from in-				<i>Chlonaphatase</i> , see Chloronaphtha-			
digo	....	12,	306	lin	....	14,	38
„ margaric acid	....	16,	335	<i>Chlonaphhtëse</i> , see Bichloronaph-			
Chiastolite	....	3,	412	thalin	....	14,	41
Chica-red	....	17,	18	„ ( <i>bromure de</i> ), see			
Chicory-roots, preparation of				Bihydrobromate of Bichloro-			
inulin from	....	15,	114	bibromonaphthalin	....	14,	75
Children's battery	....	1,	425	<i>Chlonaphhtise</i> , see Terchloronaph-			
Chili Saltpetre	....	3,	117	thalin	....	14,	49
Chimaphillin	....	18,	220	<i>Chlonaphhtose</i> , see Quadrichloro-			
<i>China bicolor</i> , bitter principal				naphthalin	....	14,	58
of	....	18,	221	Chloracetals	....	13,	477
„ <i>de Cusco vera</i> , prepara-				Chloracetamic Acid	....	9,	272
tion of aricine from	....	17,	569	Chloracetamide	9, 270; 12,	541	
„ <i>Jaen fusca</i> , preparation				Chloracetate of Amyl	....	11,	70
of paricine from	....	17,	571	Chloracetates, metallic	....	12,	537
„ <i>nova</i> , kinovin in the				Chloracetene	....	13,	533
bark of	....	18,	26	Chloracetic Acid	....	12,	537
China Orange-oil	....	14,	306	„ formation of			
Chinese, chemical knowledge of	1,	3		glycolic acid from	....	13,	434
„ Radish, oil of	....	17,	554	Chloraceticin, Glycolic	....	13,	430
„ Tallow	....	16,	388	Chloracetones	....	13,	463
„ Wax, preparation of				Chloracetoneitrile	....	9,	295
palmitic acid from	....	14,	353	Chloracetyl	....	9,	191
„ Wax, occurrence of Ce-				Chloracetyphide	....	9,	224
rotic acid in	....	18,	135	Chloral	....	9, 203; 13,	533
Chinic Acid, see Kinic Acid.				„ -hydrate	....	9,	205
<i>Chiococca racemosa</i> , occurrence				„ insoluble	....	9,	235
of Caïncic acid in	....	18,	145	„ mesitic	....	9,	27
Chiococcic acid	....	18,	142	Chloralbin	....	11,	390
Chinoline	....	13,	243	Chloraldehyde	....	9,	218
„ with Mercuric Chlo-				Chloraldehydene	....	9,	191
ride	....	13,	250	Chloralide	9, 207; 13,	534	
„ Chloro-aurate	....	13,	250	Chloralise	....	16,	465
„ Chloropalladite	....	13,	251	Chloraloil	....	16,	464
„ Chloroplatinate	....	13,	251	Chloramylal	....	11,	43
„ Formiate	....	13,	252	Chloranil	....	11,	196
„ Hydrochlorate	....	13,	248	Chloranilamic Acid	....	11,	239
„ Hydrochlorate of,				Chloranilamide	....	11,	242

Chloranilic Acid	...	...	11, 190	Chlorethylate of Ethylidine	...	...	13, 454
Chloraniline	...	...	11, 281	Chloreuxanthic Acid	...	...	17, 536
„ salts	...	...	11, 283	Chloreuxanthone	...	...	17, 184
Chloranisol, <i>see</i> Terchloranethol			14, 215	Chlorhelenin	...	...	17, 525
Chloranisate of Ethyl	...	...	13, 136	Chlorhelicin	...	...	15, 446
„ Methyl	...	...	13, 136	Chlorhydranil	...	...	11, 199
Chloranisic Acid	...	...	13, 135	Chlorhydride of Cyanogen	...	...	9, 463
Chloranisol	...	...	14, 215	Chlorhydrin	...	...	9, 498
Chloraniso-nitranisic Acid	...	...	13, 142	„ Cetylic	...	...	16, 373
Chloranthracene	...	...	16, 167	„ Glycolic	...	...	13, 427
„ hydrochlorate				Chlorhydrins	...	...	13, 577
„ of	...	...	16, 168	Chlorhydrocarotin	...	...	17, 55
Chlorapatite	...	...	3, 219	Chlorhydrodibromhydrin	...	...	13, 578
Chlorarsenide of Mercury	...	...	6, 118	Chlorhydromannitan	...	...	15, 373
Chlorate of Alumina	...	...	3, 316	Chlorhydronitrate of Diplatina-			
„ Ammonia	...	...	2, 480	mine	...	...	6, 318
„ Baryta	...	...	3, 160	Chloric Acid	...	...	2, 312
„ Cinchonine	...	...	17, 208	„ Acid, action of, on orga-			
„ Berberine	...	...	17, 191	nic compounds	...	...	7, 125
„ Brucine	...	...	17, 580	„ Oxide	...	...	2, 309
„ Cobalt-oxide	...	...	5, 337	„ Oxide, action of, on orga-			
„ Cupric oxide	...	...	5, 442	nic compounds	...	...	7, 125
„ Lead-oxide	...	...	5, 148	„ Oxide, emission of light			
„ Lime	...	...	3, 212	in the sudden decompo-			
„ Lithia	...	...	3, 131	sition of	...	...	1, 206
„ Magnesia	...	...	3, 243	„ Oxide, maximum tension			
„ Manganous oxide	...	...	4, 230	of, at different tempera-			
„ Mercuric oxide	...	...	6, 62	tures	...	...	1, 261
„ Mercurous oxide	...	...	6, 61	Chloride of Acetyl	...	9, 191; 10, 536	
„ Nickel-oxide	...	...	5, 378	„ Acetyl, action of, on			
„ Silver-oxide	...	...	6, 167	anhydrous sulphu-			
„ Morphine	...	...	16, 431	ric acid	...	...	13, 455
„ Potash	...	...	3, 58	„ Acetyl, compound of,			
„ Potash, preparation				with aldehyde	...	...	13, 441
of oxygen from	...	...	2, 20	„ Acetylium	...	...	10, 539
„ Potash, use of, in				Chlorides of the Alkalis	...	...	2, 299
ultimate analysis				Chloride of Aluminum	...	...	3, 315
of organic com-				„ Aluminum with Am-			
pounds	...	...	7, 86	monia	...	...	3, 320
„ Quinine	...	...	17, 282, 615	„ Aluminum and Phos-			
„ Soda	...	...	3, 114	phuretted hydro-			
„ Strontia	...	...	3, 178	gen	...	...	3, 317
„ Strychnine	...	...	17, 493	„ Aluminum and Po-			
„ Uranous oxide	...	...	4, 182	tassium	...	...	3, 323
„ Zinc-oxide	...	...	5, 32	„ Aluminum and So-			
Chlorates, metallic	...	...	2, 314	dium	...	...	3, 326
Chlorazolitmin	...	...	12, 366	„ Amidogen	...	...	2, 470
Chlorazol	...	...	18, 258	„ Ammonium	...	...	2, 478
Chlorazosuccic Acid	...	...	10, 36	„ Ammonium with Bi-			
<i>Chlorbronaphtise</i> , A. (Laurent's),				cyanide of Plati-			
<i>see</i> Bromobichloronaphtha-				num	...	...	8, 47
lin	...	...	14, 72	„ Ammonium with			
<i>Chlorébronaphtine</i> (Laurent's)			14, 73	Cyanide of Mer-			
Chlorelayl-hyposulphuric Acid	...	...	2, 340	cury	...	...	8, 17
<i>Chlorenbronaphtone</i> (Laurent's)			14, 77	„ Amyl	...	...	11, 42
<i>Chloréthase</i>	...	...	9, 191	„ Anisyl	...	...	13, 134
Chloretherose, hydrochlorate of			9, 213	„ Antimony	...	...	4, 365
<i>Chloréthèse</i>	...	...	9, 196	„ Antimony and Po-			
<i>Chloréthose</i>	...	...	9, 214	tassium	...	...	4, 381



Chloride of Antimony and So-				Chloride of Calcium with Aurate	
dium ....	4,	382		of Lime ....	6, 234
„ Arsenethylum ....	9,	77		„ Calcium with Carbo-	
Chlorides of Arsenic ....	4,	285		nate of Lime ....	3, 219
Chloride of Arsentriethyl ....	9,	76		„ Calcium with Cya-	
„ Auric ....	6,	215		nide of Mercury....	8, 23
„ Aurous ....	6,	215		„ Calcium with Lac-	
„ of Barium ....	3,	157		tate of Ethyl ....	11, 497
„ Barium with Aurate				„ Calcium with Lac-	
of Baryta ....	6,	234		tate of Lime ....	11, 484
„ Barium with Cya-				„ Calcium with Oxal-	
nide of Mercury....	8,	22		ate of Lime ....	9, 132
„ Barium and Fluoride				„ Calcium with Sul-	
of Barium ....	3,	166		phide of Calcium	3, 219
„ Benzoyl ....	12,	108		„ Capryl ....	13, 195, 216, 587
„ Benzoyl, combina-				„ Caprylene ....	13, 588
tion of, with bi-				„ Carbonyl, compound	
chlorovinic ether	12,	111		of, with Cyanide of	
„ Benzoyl, combination				Ethyl ....	13, 457
of, with Bitter Al-				„ Cerium ....	3, 270
mond Oil ....	12,	111		„ Cetyl ....	16, 369
„ Benzyl ....	12,	50		„ Chlorobenzoyl ....	12, 116
„ Benzylene....	12,	51		„ Chloroxynaphthalin	14, 68
„ Binitromethylene ....	7,	360		„ Chromium ....	4, 130
„ Biplumbic Triethyl	13,	511		„ Cholesteryl ....	18, 117
„ Boron ....	2,	327		„ Cimicyl ....	16, 286
„ Bisethyl ....	9,	90		„ Cinnamyl ....	13, 294
„ Bismuth ....	4,	438		„ Cobalt ....	5, 336
„ Bismuth and Am-				„ Cobalt with Cyanide	
monium ....	4,	444		of Mercury ....	8, 26
„ Bismuth and Potas-				Chlorides of Copper ....	5, 438
sium ....	4,	447		Chloride of Cumyl ....	14, 165
„ Bismuth and So-				„ Cupric ....	5, 438
dium ....	4,	448		„ Cuprico-ammonic ....	5, 453
„ Bistannamyl ....	11,	131		„ Cuproso-ammonic ....	5, 453
„ Bistannic Triethyl	13,	508		„ Cuproso-sodic ....	5, 462
„ Bromine ....	2,	350		„ Cuprous ....	5, 438
„ Butyl ....	10,	102		„ Cuprous, with Xan-	
„ Butylene ....	10,	103		thamide ....	9, 277—282
„ Butyryl ....	10,	139		„ of Cyanogen and Anti-	
„ Cacodyl ....	9,	343		mony ....	8, 146
„ Cadmium ....	5,	60		„ Cyanogen and Iron	8, 147
„ Cadmium and Am-				„ Cyanogen, liquid ....	9, 466
monium ....	5,	63			13, 565
„ Cadmium with Hy-				„ Cyanogen, solid ....	9, 466
drochlorate of Chi-				„ Cyanogen and Tita-	
noline ....	13,	250		nium ....	8, 146
„ Cadmium and Potas-				„ Cyanogen, volatile	8, 140
sium ....	5,	64		„ Cymyl and Hydro-	
„ Cadmium and So-				gen ....	14, 214
dium ....	5,	64		„ Draconyl ....	14, 216
„ Cajputene ....	14,	514		„ Ethyl ....	8, 367
„ Calcium ....	3,	206		„ Ethylene-stannethyl	9, 101
„ Calcium with Ace-				„ Ethylidene ....	13, 452
tate of Lime ....	8,	302		„ Ethyl-stannethyl ....	9, 106
„ Calcium, alcoholate				„ Ferric ....	5, 253
of ....	8,	267		„ Ferrico-ammonic ....	5, 263
„ Calcium with Am-				„ Ferrico-potassic ....	5, 271
monia ....	3,	215		„ Ferroso-ammonic ....	5, 263

Chloride, Ferroso-potassic ....	5, 271	Chloride, Mercuric, with	
„ Ferrous ....	5, 251	Strychnine ....	17, 497
„ or Fluoride of Cal-		„ Mercuric, with Sul-	
cium with Tri-		phate of Strych-	
phosphate of Lime....	3, 219	nine ....	17, 497
„ of Formyl (so called)	9, 196	„ Mercurous ....	6, 45
„ Glucinum ....	3, 299	„ Mercurous, with	
Chlorides of Gold ....	6, 215	Ammonia ....	6, 83
Chloride of Gold and Ammo-		„ of Mercury and Barium	6, 106
nium ....	6, 225	„ Mercury and Cerium	6, 109
„ Gold and Cobalt ....	6, 246	„ Mercury and Cobalt	6, 129
„ Gold and Nickel ....	6, 24	„ Mercury and Copper	6, 131
Chlorides of Iodine ....	2, 346, 348	„ Mercury, Copper,	
Chloride of Iodine and Ammo-		and Potassium ....	6, 131
nium ....	2, 487	„ Mercury with Chino-	
„ Iodine and Magne-		line ....	13, 250
sium ....	3, 243	„ Mercury and Gluci-	
„ Iodine and Potas-		num ....	6, 109
sium ....	3, 63	„ Mercury and Hydro-	
„ Iridic ....	6, 380	gen ....	6, 61
„ Iridious ....	6, 378	„ Mercury and Iron	6, 129
„ of Iridium and Silver	6, 392	„ Mercury and Man-	
Chlorides of Iron ....	5, 251	ganese ....	6, 116
Chloride of Lanthanum ....	3, 279	„ Mercury and Mag-	
„ Lead ....	5, 145	nesium ....	6, 109
„ Lead and Ammo-		„ Mercury and Nickel	6, 130
nium ....	5, 160	„ Mercury and Sodium	6, 104
„ Lead with Arseniate		„ Mercury and Stron-	
of Lead-oxide ....	5, 174	tium ....	6, 107
„ Lead and Barium ....	5, 163	„ Mercury and Tin ....	6, 125
„ Lead with Phos-		„ Mercury and Ytt-	
phate of Lead-		rium ....	6, 109
oxide and Lime ....	5, 164	„ Mercury and Zinc....	6, 123
„ Lead and Sodium....	5, 163	„ Mesityl ....	9, 27
„ Lime ....	2, 300; 3, 208	Chlorides, Metallic ....	2, 351
„ Lithium ....	3, 130	„ Metallic, action of, on	
„ Magnesium ....	3, 241	Alcohol ....	13, 418
„ Magnesium, alcoh-		„ Metallic, action of, on	
late of ....	8, 268	organic compounds	7, 130
„ Magnesium with		„ Metallic, compounds	
Aurate of Magnesia	6, 235	of, with Ammonia....	2, 427
„ Magnesium with		„ Metallic, compounds	
Cyanide of Mer-		of, with Cyanide of	
cury ....	8, 23	Ethyl ....	13, 457
„ Magnesium and So-		„ Metallic, compounds	
dium ....	3, 253	of, with Cyanide of	
„ Manganese ....	4, 227	Methyl ....	13, 411
„ Manganese with		„ Metallic, compounds	
Cyanide of Mer-		of, with double Sili-	
cury ....	8, 24	cates ....	3, 461
„ Mercuric ....	6, 53	„ Metallic, compounds	
„ Mercuric, with Al-		of, with Hydrocya-	
karsin ....	9, 324	nic Acid ....	8, 148
„ Mercuric, with Am-		„ Metallic, compounds	
monia ....	6, 84	of Urea with	
„ Mercuric, with Cu-		7, 372; 13, 403	
pric Acetate ....	8, 332	„ Metallic, Electrolysis	
„ Mercuric, with Ni-		of ....	1, 456
cotine ....	14, 228	„ Metallic, hydrated ....	2, 353

Chloride of Methstannamyl ....	11, 132	Chloride of Potassium with Bi-	
„ Methystannbiamyl ....	11, 133	niodate of Potash	3, 72
„ Methyls		„ Potassium with Bi-	
7, 287 ; 10, 495 ; 13, 392		sulphite of Osmious	
„ Methyl, action of		Oxide ... ..	6, 419
heat on ... ..	12, 480	„ Potassium with Cya-	
„ Methyl, chlorinated	7, 288	nide of Mercury ....	8, 20
„ Methylene....	13, 391	„ Potassium with	
„ Methylene - stanna-		Ethylochloride of	
myl ... ..	11, 132	Platinum ... ..	8, 391
„ Methylene - stanne-		„ Potassium with Sul-	
thyl ... ..	9, 100	phate of Potash ....	3, 71
„ Methylic, Bisulphide		„ Potassium and Sul-	
of ... ..	10, 502	phate of Potash	
„ Methyloplumbethyl	9, 108	with Chloro-hypo-	
„ Methylostannethyl	9, 104	sulphate of Iridious	
„ Naphthalin, Lau-		Oxide ... ..	6, 389
rent's ... ..	14, 58	„ Potassium with Sul-	
„ Naphthylsulphurous	14, 505	phite of Iridious	
„ of Nickel ... ..	5, 377	Oxide ... ..	6, 388
„ Nickel and Ammo-		„ Propylene ... ..	9, 398
nium ... ..	5, 383	„ Pteyleyl ... ..	9, 19
„ Nickel with Cyanide		Chlorides of Rhodium ...	6, 363
of Mercury ... ..	8, 26	„ Ruthenium ... ..	6, 400
„ Niobium ... ..	4, 18	Chloride of Salicyl ... ..	12, 294
„ Nitransyl ... ..	13, 142	„ Selenethyl....	8, 356
„ Nitrobenzoyl ... ..	12, 137	Chlorides of Selenium ...	2, 345
„ Nitrogen ... ..	2, 470	Chloride of Silicium ... ..	3, 360
„ Nitrogen, emission of		„ Silver ... ..	6, 160
light on the sudden		„ Silver, decomposition	
decomposition of....	1, 206	of, by light ... ..	1, 172
„ Octyl ... ..	13, 587	„ Silver, decomposition	
„ Octylene ... ..	13, 588	of, by Metallic Sul-	
„ Cenanthyl ... ..	12, 470	phides and Arse-	
„ Cenanthylene ... ..	12, 461	nides ... ..	6, 428
Chlorides of Osmium ... ..	6, 412	„ Silver, reduction of	6, 428
Chloride of Othyl ... ..	9, 195	„ Silver, solubility of,	
„ Palladic ... ..	6, 349	in Hydrochloric	
„ Palladious ... ..	6, 349	Acid ... ..	6, 428
„ of Pelargyl ... ..	13, 377	„ Silver and Ammo-	
„ Pelopium ... ..	4, 22	nium ... ..	6, 176
„ Perchloroxynaphtha-		„ Silver and Barium....	6, 181
lin ... ..	14, 70	„ Silver and Calcium	6, 182
„ Phenyl ... ..	11, 173	„ Silver and Hydro-	
„ Phoryl ... ..	13, 343	gen, aqueous ... ..	6, 166
Chlorides of Phosphorus ...	2, 328	„ Silver and Potassium	6, 179
Chloride, Platinic ... ..	6, 294	„ Silver and Sodium....	6, 180
„ Platinous ... ..	6, 293	„ Sodium ... ..	3, 110
„ of Platinum, detonat-		„ Sodium with Aurate	
ing inflammable, or		of Soda ... ..	6, 233
hydrocarburetted	8, 388	„ Sodium, compound	
„ Potash ... ..	3, 57	of, with Cane-sugar	15, 283
„ Potassium ... ..	3, 56	„ Sodium with Cya-	
„ Potassium with Au-		nide of Mercury ....	8, 21
rate of Potash ... ..	6, 230	„ Sodium with Ethy-	
„ Potassium with Car-		lochchloride of Pla-	
bonate of Potash....	3, 71	tinum ... ..	8, 392
„ Potassium with Bi-		„ Sodium, compounds	
cyanide of Platinum	8, 51	of, with Glucose ...	15, 325



Chloride of Sodium and Iodate of Soda ....	3, 121	Chlorides of Tungsten ....	4, 35
„ Sodium, compound of, with Urea ....	7, 372	Chloride of Uranous Oxide ....	4, 182
„ Stannamyl ....	11, 131	„ Uranous Oxide and Ammonium ....	4, 186
„ Stannethyl ....	9, 98	„ Uranous Oxide and Potassium ....	4, 188
„ Stannic ....	5, 88	„ Uranyl ....	4, 181
„ Stannous ....	5, 84	„ Uranyl with Hydrochlorate of Chino- line ....	13, 249
„ of Stibethyl 9, 83; 10, 526		„ Uranyl and Potas- sium ....	4, 188
„ Stibethylum ....	10, 528	Chlorides of Uranium ....	4, 183
„ Stibethylum and Mercury ....	10, 529	Chloride of Valeryl ....	11, 527
„ Stibethylum and Platinum....	10, 529	„ Vanadium and Am- monium ....	4, 98
„ Stibmethylethylum 13, 502		„ Yttrium ....	3, 289
„ Stibmethylum ....	7, 327	„ Yttrium and Potas- sium ....	3, 290
„ Stibtrianyl ....	11, 127	„ Zinc ....	5, 30
„ Strontium ....	3, 177	„ Zinc and Ammo- nium ....	5, 42
„ Strontium with Au- rate of Strontia ....	6, 234	„ Zinc with Cratinine 10, 259	
„ Strontium with Cya- nide of Mercury ....	8, 22	„ Zinc and Cratinine, preparation of Crea- tinine from ....	10, 251
„ Styrol ....	13, 16	„ Zinc with Cyanide of Mercury ....	8, 24
„ Succinyl ....	10, 136	„ Zinc and Potassium 5, 44	
„ Sulphobenzoyl ....	12, 117	„ Zinc and Sodium ....	5, 45
„ Sulphophenyl ....	11, 174	„ Zirconium....	3, 345
Chlorides of Sulphur ....	2, 351	Chlorimasatin ....	13, 108
Chloride of Sulphur and Arsenic 4, 285		Chlorimesatin ....	13, 85
„ Sulphur, Sulphazotic 2, 475		Chlorinated Chloride of Methyl 7, 288	
„ Sulphur and Tin ....	5, 90	„ Oil from Cinnamic Acid ....	13, 297
„ Sulphur and Tita- nium ....	3, 484	„ Oil of Turpentine....	14, 439
Chlorides of Tantalum....	4, 5	„ Oils ....	16, 316
Chloride of Telluramyl....	11, 45	„ Peppermint - cam- phor ....	14, 453
„ Tellurethyl ....	8, 385	Chlorindatmite....	11, 285
„ Telluric ....	4, 412	Chlorindin ....	13, 87
„ Telluric, Tellurite of... 4, 412		Chlorine ....	2, 288
Chlorides of Tellurium....	4, 411	„ absorption of, by vola- tile oils ....	7, 165
Chloride of Tellurium and Silver 6, 193		„ action of, on acetic ether ....	13, 534
„ Telluromethyl ....	10, 494	„ action of, on aldehyde 12, 535	
„ Tellurous ....	4, 411	„ action of, on sulphide of ethyl ....	10, 513
„ of Thorinum ....	3, 334	„ action of, on the sul- phides of methyl ....	10, 500
„ Thorinum and Pot- assium ....	3, 336	„ action of, on sulpho- cyanide of methyl ....	10, 511
Chlorides of Tin ....	5, 84	„ atomic weight of ....	2, 293
„ Titanium ....	3, 479	„ behaviour of organic compounds contain- ing, towards fixed alkalis ....	7, 139
Chloride of Titanium and Am- monium ....	3, 484		
„ Titanium, compound of, with Cyanide of Methyl ....	13, 412		
„ Titanium with Hy- drochloric Acid and Phosphuretted Hy- drogen ....	3, 481		
„ Titanium and Phos- phuretted Hydro- gen ....	3, 480		
„ Triethylphosphine....	12, 525		

Chlorine, compounds of, with nuclei ....	7, 212	Chlorisatyde ....	13, 100
„ electrolysis of aqueous solution of ....	1, 451	Chlorisatydic acid ....	13, 101
„ history of ....	2, 289	Chlorite ....	3, 422
„ hydrate of ....	2, 293	„ of Ammonia ....	2, 479
„ liquefaction of ....	2, 291	„ Baryta ....	3, 160
„ memoirs relating to ....	2, 288	„ Lead-oxide ....	5, 148
„ maximum tension of, at different temperatures	1, 261	„ Potash ....	3, 37
„ in organic compounds	7, 5	„ Silver-oxide ....	6, 166
„ oxygen-compounds of	2, 294	„ Soda ....	3, 114
„ peroxide of ....	2, 309	„ Strontia ....	3, 178
„ preparation of ....	2, 290	Chlorites ....	2, 308
„ properties of ....	2, 292	Chlorite-spar ....	5, 287
„ protoxide of ....	2, 304	<i>Chloronaphtalase</i> , see Chloronaphtalin ....	14, 38
„ quantities of heat evolved in the combination of different bodies with ....	1, 294	<i>Chloronaphtalèse</i> , see Bichloronaphtalin ....	14, 41
„ replacement of, by amidogen ....	7, 74	<i>Chloronaphtalise</i> , see Terchloronaphtalin ....	14, 49
„ replacement of, by hydrogen ....	7, 74	<i>Chloronaphtalise</i> , <i>A.</i> , see Perchloronaphtalin ....	14, 69
„ replacement of, by sulphur ....	7, 75	<i>Chloronaphtalose</i> , see Quadrichloronaphtalin ....	14, 59
„ sources of ....	2, 290	Chloro-aurate of Aconitine ....	18, 176
„ substitution of, for hydrogen ....	7, 73	„ Aniline ....	11, 261
„ substitution of, for hydrogen in organic compounds ....	7, 119	„ Atropine ....	16, 454
„ use of, for preserving meat ....	7, 116	„ Barium ....	6, 233
„ and Hydrogen, combination of, induced by light ....	1, 170; 2, 319	„ Berberine ....	17, 193
„ -compounds, action of alcoholic potash on ....	13, 421	„ Biethylconine ....	13, 173
„ -nuclei ....	7, 170	„ Brucine ....	17, 582
„ -nuclei, aldehydes of ....	7, 194	„ Cadmium ....	6, 239
„ -salts ....	2, 9, 355	„ Caffeine ....	13, 233
„ -water ....	2, 293	„ Calcium ....	6, 234
Chloriodide of Lead ....	5, 151	„ Caprylamine ....	13, 221
„ Platinum ? ....	6, 295	„ Chinoline ....	13, 250
„ Silver ....	6, 167	„ Chlorogenine ....	18, 191
Chloriodides of Tetramethylum	12, 490	„ Cinchonidine ....	17, 613
Chloriodoform ....	7, 337	„ Cinchonine	17, 213, 610
Chloriridiate of Ammonium ....	6, 382	„ Corydaline ....	17, 609
„ Brucine ....	17, 582	„ Cyaniline ....	11, 362
„ Cinchonine ....	17, 213	„ Ethylamine ....	9, 60
„ Narcotine ....	16, 145	„ Ethylmethylconine ....	13, 175
„ Potassium ....	6, 386	„ Ethylnicotine ....	14, 238
„ Sodium ....	6, 391	„ Ethylopyridine ....	10, 408
Chlorisamic acid ....	13, 112	„ Hydrastine ....	17, 545
Chlorisamide ....	13, 113	„ Lithium ....	6, 233
Chlorisatic acid ....	13, 75	„ Magnesium ....	6, 235
Chlorisatin ....	13, 72	„ Manganese ....	6, 237
Chlorisatosulphurous Acid ....	13, 77	„ Melaniline ....	11, 355
		„ Mercurialine ....	18, 28
		„ Methylamine ....	7, 317
		„ Methylbrucine ....	17, 587
		„ Methylnicotine ....	14, 235
		„ Methylstrychnine ....	17, 509
		„ Narceine ....	17, 600
		„ Neurine ....	18, 381
		„ Pelosine ....	17, 27

- Chloro-aurate of Picoline ... 11, 270  
 „ Potassium .... 6, 229  
 „ Quinidine .... 17, 300  
 „ Sincaline .... 11, 116  
 „ Sodium .... 6, 232  
 „ Sparteine .... 16, 282  
 „ Strontium .... 6, 234  
 „ Strychnine .... 17, 498  
 „ Tetramethyl-  
   phosphonium 12, 493  
 „ Tetrethylum... 9, 68  
 „ Tetrethylphos-  
   phonium .... 12, 527  
 „ Toluidine .... 12, 336  
 „ Veratrine .... 18, 183  
 „ Zinc .... 6, 239  
 Chlorobenzamide .... 12, 151  
 Chlorobenzene .... 11, 173  
 „ sulphate of .... 11, 175  
 Chlorobenzile .... 12, 184  
 Chlorobenzoate of Ethyl .... 12, 115  
 Chlorobenzoates, metallic .... 12, 114  
 Chlorobenzoic acid .... 12, 112  
 Chlorobenzol .... 12, 51  
 Chlorobenzone .... 11, 180  
 Chlorobenzoyl Chloride .... 12, 116  
 „ and Hydrogen,  
   nitride of .... 12, 152  
 Chlorobibromaniline .... 11, 286  
 Chlorobibromide of Cacodyl .... 13, 495  
 Chloroborate of Ammonia .... 2, 481  
 Chlorobromide of Silver .... 6, 167  
 Chlorobromonaphthalin Hydro-  
   chlorate of .... 14, 71  
 Chlorobutylene... .... 10, 138  
 Chlorobutyral .... 10, 139  
 Chlorobutyrase... .... 10, 138  
 Chlorobutyryn, glycolic .... 13, 432  
 Chlorocadmate of Cinchonine... 17, 211  
 „ Lecithine .... 18, 378  
 „ Strychnine .... 17, 496  
 Chlorocaffeine .... 13, 235  
 Chlorocaoutchin .... 14, 330  
 Chlorocaprylene, binoxide .... 13, 216  
 Chlorocarbethamic acid .... 9, 229  
 Chlorocarbethamide .... 9, 228  
 Chlorocarb-hyposulphuric acid ... 2, 340  
 Chlorocarbonate of Ammonia .... 2, 480  
 „ Lead .... 5, 148  
 Chlorocarbonic Oxide .... 2, 326  
 „ Oxide, chloro-  
   hyposulphite of 2, 337  
 Chlorocarotin .... 17, 16  
 Chlorocarvene .... 14, 285  
 Chlorocerotal .... 18, 140  
 Chlorocerotene... .... 18, 140  
 Chlorocerotic Acid .... 18, 139  
 Chlorochinhydrone .... 11, 188  
 Chlorochinone .... 11, 185  
 Chlorocholesterin .... 18, 122  
 Chlorochromic acid .... 4, 135  
 Chlorocinnamic acid .... 13, 295  
 Chlorocinnose .... 13, 298  
 Chlorocodeine .... 17, 39  
 Chlorocomenic acid .... 11, 390  
 Chlorocuminol .... 14, 152, 166  
 Chlorocumol .... 14, 152  
 Chlorocumyl .... 14, 165  
 „ Hydride .... 14, 166  
 Chlorocyanamide 9, 478; 10, 548  
 Chlorocyanic oil .... 9, 466  
 Chlorocyanide of Ethyl ? .... 8, 492  
 „ Formic Ether ? 8, 492  
 „ Mercury .... 8, 17  
 Chlorocyanilide... .... 11, 363  
 Chlorocyanuric ether .... 13, 563  
 Chlorocymene, Hydrochlorate of 14, 214  
 Chlorœnanthic acid .... 12, 460  
 „ ether .... 12, 460  
 Chlorœnanthylene .... 12, 469  
 Chloro-ferrocyanide of Ammo-  
   nium 7, 451  
 „ Ethyl 9, 354  
 Chlorofillic acid .... 16, 128  
 Chlorofilipelosates .... 15, 31  
 Chlorofluoride of Lead... .... 5, 151  
 Chloroform .... 7, 343; 9, 506  
 „ formation of, from  
   carbon bichloride... 13, 400  
 „ reaction of, with  
   ammonia and with  
   aniline .... 13, 400  
 „ solubility of, in al-  
   cohol .... 8, 273  
 „ testing of purity  
   of .... 13, 400  
 Chloroformyl-hyposulphuric Acid 2, 340  
 Chloroformiate of Amyl .... 11, 66  
 Chlorogenate of Caffeine and  
   Potash .... 15, 509  
 Chlorogenin .... 16, 65  
 „ formation of chloro-  
   rubin from .... 16, 70  
 Chlorogenine .... 18, 189  
 Chlorohumic acid .... 17, 465  
 Chlorohydrokinone, brown .... 11, 187  
 „ colourless .... 11, 187  
 Chlorohydrate of Cetylene .... 16, 373  
 Chlorohyposulphite of Chlorocar-  
   bonic oxide .... 2, 337  
 Chlorohyposulphate of Iridious  
   oxide with Chloride of Potas-  
   sium .... 6, 389  
 Chlorohyposulphate of Iridious  
   oxide, with Sulphite of Pot-  
   ash .... 6, 388  
 Chlorohyposulphate of Iridious  
   oxide, with Sulphite of Pot-



ash and Chloride of Potas-					
sium ....	....	....	....	6,	390
Chlorohyposulphite, Mercurous				6,	65
Chloroïd ....	....	....	....	1,	431
Chloroïds ....	....	....	....	2,	18
Chlorokinhydrone ....	....	....	....	11,	188
Chlorokinone ....	....	....	....	11,	185
Chloroleic acid ....	....	....	....	17,	101
Chloromeconin ....	....	....	....	14,	441
Chloromenthene ....	....	....	....	14,	480
Chloromercurate of Ammonia ....				6,	84
„ Berberine ....				17,	192
„ Brucine ....				17,	581
„ Cinchonidine ....				17,	226
„ Cinchonine ....				17,	212
„ Chlorogenine ....				18,	191
„ Conine ....				13,	166
„ Corydaline ....				17,	609
„ Cotarnine ....				16,	133
„ Ethylamine ....				9,	60
„ Ethylmethyl-					
conine ....				13,	174
„ Ethylnico-					
tine ....				14,	237
„ Ethylstrych-					
nine ....				17,	512
„ Harmaline ....				16,	118
„ Laudanine ....				18,	198
„ Methylamine ....				7,	317
„ Methylbru-					
cine ....				17,	587
„ Methylnico-					
tine ....				14,	235
„ Methyl-					
strychnine ....				17,	509
„ Morphine ....				16,	433
„ Naphthyla-					
mine ....				14,	100
„ Narceine ....				17,	600
„ Narcotine ....				16,	144
„ Nicotine ....				14,	229
„ Nitroharma-					
line ....				16,	124
„ Nitrohar-					
mine ....				16,	111
„ Opianine ....				16,	147
„ Papaverine ....				18,	203
„ Piperine ....				15,	22
„ Quinidine ....				17,	300
„ Quinine ....				17,	284
„ Sparteine ....				13,	152
„ Strychnine ....				17,	497
„ Tetrethylum ....				9,	68
„ Thebenine....				18,	211
„ Triphenyla-					
mine ....				13,	306
Chloromercurite of Ammonia ....				6,	83
Chloromethylase ....				7,	342
Chloromethylic Formiate ....				7,	309
Chloromethylic Oxalate ....				9,	175
Chloromethyl-selenious acid ....				10,	492
Chloromichmyl....				12,	116
Chloronaphthalates ....				14,	66
Chloronaphthalin ....				14,	38
„ Hydrochlorate ....				14,	39
„ Sulphite ....				14,	505
Chloronaphthone, F. ....				14,	61
Chloronaphthyl, Chloride of, <i>see</i>					
Bichloronaphthalin.					
Chloroniceamide ....				11,	177
Chloroniceic acid ....				11,	176
„ ether ....				11,	178
Chloronicene ....				14,	167
Chloronidine ....				14,	182
Chloronitric acid ....				2,	477
Chloronitrobenzoate of Baryta. ..				12,	138
„ Ethyl ....				12,	139
„ Silver ....				12,	139
Chloronitrobenzoic acid ....				12,	138
Chloronitroharmine ....				16,	113
Chloronocerin ....				15,	42
Chloropalladiate of Ammonium ....				6,	353
„ Potassium ....				6,	354
„ Toluidine ....				12,	336
Chloropallidite of Ammonium ....				6,	352
„ Barium ....				6,	355
„ Cadmium ....				6,	356
„ Calcium ....				6,	355
„ Chinoline ....				13,	251
„ Cumidine ....				13,	351
„ Ethylamine ....				9,	62
„ Magnesium ....				6,	355
„ Manganese ....				6,	356
„ Nickel....				6,	357
„ Potassium ....				6,	354
„ Sodium ....				6,	355
„ Strychnine ....				17,	498
„ Zinc ....				6,	356
Chlorophane ....				1,	196
Chlorophenylic Benzoate ....				12,	89
Chlorophenylimesatin ....				13,	84
Chlorophosphate of Lead ....				5,	149
Chlorophosphide of Nitrogen ....				2,	474
„ Nitrogen,					
composition of the residue ob-					
tained by heating ....				2,	440
Chlorophosphite of Lead ....				5,	149
Chlorophosphoric acid, <i>see</i> Oxy-					
chloride of Phosphorus.					
Chlorophyll ....				17,	3
Chloropianyl ....				14,	441
Chloropicrin ....				11,	216
„ relation of, to ful-					
minic acid ....				12,	553
Chloropicryl ....				11,	235
Chloroplatinate of Acediamine....				12,	546
„ Acetonine ....				13,	378
„ Alanine ....				9,	436

Chloroplatinate of	Amarine ....	12, 197	Chloroplatinate of	Conine ....	13, 167
"	Amidanisic		"	Copper ....	6, 337
"	acid ....	13, 145	"	Corydaline ....	17, 609
"	Amidocuminic		"	Cotarnine ....	16, 133
"	acid ....	14, 175	"	Cumaramine	13, 338
"	Amidosulpho-		"	Cumidine ....	13, 351
"	benzene ....	11, 348	"	Cyanethine....	13, 236
"	Ammonium....	6, 307	"	Cyaniline ....	11, 362
"	Amylamine....	11, 107	"	Cymidine ....	14, 219
"	Aniline ....	11, 261	"	Diplatoso-	
"	Anisidine ....	12, 266	"	methylanine	7, 318
"	Anisine ....	13, 146	"	Dulcamarine	18, 99
"	Aribine ....	17, 563	"	Ecgonine ....	16, 304
"	Aricine ....	17, 571	"	Ethylamine....	9, 61
"	Atropine ....	16, 455	"	Ethylbrucine	17, 588
"	Barium ....	6, 327	"	Ethyl-collidine	13, 150
"	Bebirine ....	17, 172	"	Ethyleonine	13, 171
"	Benzidine ....	11, 340	"	Ethylene-bru-	
"	Benzoyl-cin-		"	cine ....	17, 589
"	chonine ....	17, 234	"	Ethyl-lepidine	14, 121
"	Berberine ....	17, 194	"	Ethylmethyl-	
"	Biamidobenzoic		"	conine ....	13, 175
"	Acid ....	12, 150	"	Ethyl-nicotine	14, 238
"	Biamidosul-		"	Ethyl-piperi-	
"	phobenzene	11, 349	"	dine ....	10, 451
"	Bichloro-cin-		"	Ethyl-pyri-	
"	chonine ....	17, 238	"	dine ....	10, 408
"	Bicinamyla-		"	Ethyl-quini-	
"	mine ....	13, 306	"	dine ....	17, 310
"	Biethopiperi-		"	Ethyl-quinine	17, 309
"	dine ....	10, 452	"	Ethylstrych-	
"	Biethylconine	13, 173	"	nine ....	17, 512
"	Biphenaniline	11, 335	"	Ethyl-toluidine	12, 340
"	Bromaniline	11, 279	"	Ferrous ....	6, 337
"	Bromo-cincho-		"	of Furfurine	10, 381
"	nine ....	17, 235	"	Guanine ....	10, 483
"	Brucine ....	17, 582	"	Harmaline ....	16, 119
"	Cacotheline	17, 359	"	Harmine ....	16, 107
"	Cadmium ....	6, 335	"	Hydrastine....	17, 545
"	Caffeine ....	13, 234	"	Hydroberbe-	
"	Calcium ....	6, 329	"	rine ....	17, 256
"	Caprylamine	13, 221	"	Hydrocincho-	
"	Casein ....	18, 316	"	nine ....	17, 231
"	Chelidonine	17, 166	"	Lanthopine....	18, 197
"	Chinoline ....	13, 251	"	Laudanine ....	18, 198
"	Chloraniline	11, 284	"	Lecithine ....	18, 378
"	Chlorocodeine	17, 40	"	Lepidine ....	14, 104
"	Chlorogenine	18, 191	"	Lophine ....	12, 203
"	Chloronitro-		"	Lutidine ....	12, 339
"	harmine ....	16, 115	"	Magnesium....	6, 330
"	Cinchonidine	17, 226	"	Manganese....	6, 332
"		613	"	Meconidine....	18, 200
"	Cinchonine....	17, 212	"	Melaniline ....	11, 355
"	Cobalt ....	6, 337	"	Menaphthyla-	
"	Cocaine ....	16, 303	"	mine ....	14, 127
"	Codamine ....	18, 193	"	Mercurialine	18, 201
"	Codeine ....	17, 35	"	Methylamine	7, 318
"	Collidine ....	13, 149	"	Methyl-bi-	
"	Conhydrine....	13, 169	"	ethylamine	11, 110

Chloroplatinate of Methyl-brucine	17, 587	Chloroplatinate of Terbromoco-	
„ Methyl-lutidine	12, 340	deine ....	17, 39
„ Methyl-nico-		Tetramethylum	7, 321
tine ....	14, 236	„ Tetramethyl-	
„ Methyl-pipe-		phosphonium	12, 493
ridine ....	10, 450	„ Tetramyla-	
„ Methyl-strych-		mine ....	11, 112
nine ....	17, 509	„ Tetrethylum	9, 68
„ Methyl-triethyl-		„ Tetrethylphos-	
phosphonium	12, 528	phonium ....	12, 557
„ Methylura-		„ Thebaine ....	18, 170
mine ....	9, 358	„ Thebenine ....	18, 211
„ Metoluidine	12, 342	„ Theobromine	12, 473
„ Morphine ....	16, 433	„ Toluidine ....	12, 336
„ Naphthyl-		„ Triethamyla-	
amine ....	14, 100	mine ....	11, 111
„ Narceine ....	17, 600	„ Triethaniline	11, 308
„ Narcogenine	16, 150	„ Triethylamyl-	
„ Narcotine ....	16, 144	phospho-	
„ Neurine ....	18, 381	nium ....	12, 529
„ Nickel ....	6, 337	„ Triethylphos-	
„ Nicotine ....	14, 231	phine ....	12, 525
„ Nitraniline ....	11, 291	„ Triethyl-to-	
„ Nitranisidine	12, 268	luidine ....	12, 342
„ Nitrocodeine	17, 41	„ Trimethyl-	
„ Nitroharm-		amyl-phos-	
line ....	16, 125	phonium ....	12, 529
„ Nitroharmine	16, 111	„ Trimethylphos-	
„ Nitropapave-		phine ....	12, 492
rine ....	17, 261	„ Tropine ....	16, 458
„ Oxyacanthine	17, 199	„ Xylidine ....	13, 147
„ Oxycinchonine	17, 232	„ Zinc ....	6, 334
„ Papaverine	17, 260 ;	Chloroplatinic Acid	6, 294
	18, 203	Chloroplatinite of Ammonium	6, 307
„ Paricine ....	17, 572	„ Nicotine ....	14, 230
„ Pelosine ....	17, 27	„ Potassium ....	6, 322
„ Picoline ....	11, 270	„ Sodium ....	6, 326
„ Piperidine ....	10, 449	„ Stannous ....	6, 335
„ Piperine ....	16, 23	Chloroplatinous Acid	6, 293
„ Potassium ....	6, 322	Chloroplatinite of Zinc	6, 334
„ Quinidine ....	17, 301	Chloropropionate of Ethyl	13, 560
„ Quinine ....	17, 286	Chloropropionic Acid	13, 559
„ Rhœadine ....	18, 207	Chloropyrocitryl	10, 438
„ Rhœaginine	18, 208	Chloropyromucate of Ethyl	10, 387
„ Seminaphthyl-		Chloropyromucyl	11, 524
amine ....	14, 109	Chloroquinhydrone	11, 188
„ Sinapine ....	14, 527	Chloroquinone ....	11, 185
„ Sincaline ....	11, 116	Chlororceid ....	12, 357
„ Sodium ....	6, 326	Chlororcein ....	12, 362
„ Solanine ....	18, 89	Chlororcin ....	12, 357
„ Solanidine ....	18, 87	Chlororhodate of Ammonium	6, 365
„ Solanine ....	18, 97	„ Potassium ....	6, 366
„ Sparteine ....	13, 153 ;	„ Sodium ....	6, 367
	16, 282	Chlororhodic Acid	18, 416
„ Stibmethylum	7, 328	Chlororubiadin	16, 62
„ Strontium ....	6, 328	Chlororubian ....	16, 46
„ Strychnine ....	17, 498	Chlororubin ....	16, 70
„ Strychnine--		Chlorosalhydramide	12, 348
bromethyl-		Chlorosalicin ....	15, 446
ammonium	17, 513	Chlorosalicylic acid	12, 296



Chlorosalicylite of Baryta ....	12, 295	Chloroxenaphtalise, Oxide of, <i>see</i>	
"    Potash ....	12, 295	Chloride of Perchloroxynaph-	
Chlorosalicylous acid ....	12, 294	alin ....	14, 70
Chlorosaligenin ....	12, 293	Chloroxethide ....	9, 244
Chlorosamide ....	12, 348	Chloroxethose ....	9, 223
Chlorosantonin ....	16, 257	Chloroxynaphthalin, Chloride ....	14, 68
Chlorosmiate of Potassium ....	6, 418	Chlorozincate of Sparteine ....	16, 282
Chlorospinelle ....	5, 275	"    Strychnine ....	17, 496
Chlorostannate of Ammonium....	5, 94	Chloro-sassafras Oil ....	14, 169
"    Barium ....	5, 99	<i>Chlorure de Chlonaphtane</i> , Lau-	
"    Magnesium....	5, 100	rent's ....	14, 57
"    Phosphuretted		" <i>Chloréthase</i> ....	9, 194
Hydrogen ....	5, 89	" <i>Chloréthèse</i> ....	9, 199
"    Potassium ....	5, 97	" <i>Chloréthose</i> ....	9, 220
"    Sodium ....	5, 98	" <i>Chloroxéthose</i> ....	9, 216
"    Strontium ....	5, 99	<i>Chlostilbase</i> ....	12, 166
Chlorostannic acid ....	5, 88	Cholacrol ? ....	9, 503
Chlorostannite of Ammonium....	5, 94	Cholalic acid, <i>see</i> Cholic acid.	
"    Barium ...	5, 99	Cholate of Ethyl ....	18, 56
"    Cinchonine ....	17, 211	"    Methyl ....	18, 56
"    Potassium ....	5, 97	Cholates, Metallic ....	18, 49
"    Strontium ....	5, 99	Cholechlorin, <i>see</i> Biliverdin ....	18, 77
Chlorostannous acid ....	5, 84	Choleic acid, <i>see</i> Taurocholic	
Chlorostearic acid ....	17, 146	acid ....	18, 63
Chlorostilbene ....	12, 170	Cholesteric acid ....	13, 157
"    Bromide ....	12, 170	Cholesterilin ....	18, 107
"    Hydrochlorate ....	12, 171	Cholesterin, detection and esti-	
Chlorostychnine ....	17, 515	mation of ....	18, 112
Chlorostyracin ....	13, 299	"    decompositions of ....	18, 113
Chlorosuberate of Ethyl ....	13, 214	"    memoirs relating to ....	18, 109
Chlorosuccic acid ....	9, 429	"    preparation of ....	18, 111
Chlorosuccilamide ....	9, 272	"    properties of ....	18, 113
Chlorosuccilic acid ....	9, 273	"    sources of ....	18, 110
Chlorosulphate of Lead ....	5, 150	Cholesterin, hydrated ....	18, 116
"    Phenyl ....	13, 455	"    Reichenbach's, from	
"    Carbon ....	2, 335	coal-tar ....	18, 122
"    Lead ....	5, 150	"    with Acetic acid ....	18, 116
"    Nitrogen ....	2, 475	"    -soda ....	18, 116
"    Phosphorus ....	2, 334	Cholesterone ....	18, 109
"    Platinum ? ....	6, 295	Cholesteryl, Acetate of....	18, 117
"    Silicium ....	3, 361	"    Benzoate ....	18, 118
"    Tin ....	5, 90	"    Butyrate ....	18, 118
Chlorosulphobenzene ....	11, 200	"    Chloride ....	18, 117
Chlorosulphobenzoic acid ....	12, 117	"    Stearate ....	18, 119
Chlorosulphobenzoic acid ....	11, 175	Cholic acid ....	18, 46
Chloro-sulphosomethylic acid ....	7, 301	Choline....	18, 378
Chlorosulphonaphthalates ....	14, 38	Choloïdanic acid ....	16, 412
Chlorosulphate of Ethyl ....	13, 455	Choloïdic acid ....	18, 52
Chlorosulphuretted Ether ....	9, 225	Cholonic acid, <i>see</i> Glycocholonic	
Chlorotellurate of Ammonium....	4, 415	acid.	
"    Potassium ....	4, 420	Chondrin ....	18, 359
Chlorotellurite of Ammonium ....	4, 415	"    coloration of blow-	
Chlorotoluol ....	12, 291	pipe flame by ....	18, 257
Chlorous acid ....	2, 305	Chondrodite ....	3, 401
Chlorovinic and Chlorovinous		Chonierite ....	3, 422
acids ....	3, 314	Chromate of Ammonia....	4, 141
Chlorovinic Formiate ....	9, 229	"    Amylstrychnine ....	17, 515
Chloroxalovinic acid ....	9, 245	"    Antimonic oxide ....	4, 390
Chloroxamethane ....	9, 290	"    Baryta ....	4, 153

Chromate of Berberine ....	17, 192	Chromate of Soda ....	4, 151
„ Bismuth-oxide ....	4, 449	„ Soda and Potash ....	4, 152
„ Brucine ....	17, 581	„ Sodium-chloride ....	4, 152
„ Casein ....	18, 314	„ Stannic oxide ....	5, 102
Chromates of Cerous oxide ....	4, 154	„ Stannous oxide ....	5, 102
Chromate of Calcium chloride ....	4, 154	„ Strontia ....	4, 153
„ Chlorogenine ....	18, 191	„ Strychnine ....	17, 495
„ Chinoline....	13, 249	„ Thorina ....	4, 155
„ Cinchonine ....	17, 211	„ Uranic oxide ....	4, 194
„ Cobalt-oxide ....	5, 347	„ Vanadic oxide ....	4, 157
„ Codeine ....	17, 33	„ Yttria ....	4, 155
„ Cupric Oxide ....	5, 467	„ Zinc-oxide ....	5, 48
„ Cupric oxide and		„ Zinc-oxide and Pot-	
Ammonia ....	5, 468	ash ....	5, 48
„ Cupric oxide and		Chromates ....	4, 119
Lead-oxide ....	5, 486	„ action of Oxalic acid	
„ Ethylene - strych-		on ....	13, 515
nine ....	17, 514	„ of Chromic oxide ....	4, 113
„ Ethylstrychnine ....	17, 512	„ Molybdic oxide ....	4, 156
„ Ferric oxide ....	5, 299	Chrome-iron-ore ....	4, 105 ; 5, 298
„ Glucina ....	4, 155	„ -mica ....	3, 450
„ Harmaline ....	16, 118	„ -red ....	5, 169
„ Harmine ....	16, 106	„ -yellow ....	5, 170
„ Iridic oxide ....	6, 391	Chromic Acetate ....	8, 306
„ Lead-oxide 4, 105 ; 5, 169		„ Acid ....	4, 116
„ „ use of in		„ Acid, action of, on al-	
ultimate analysis		cohol ....	8, 243
of organic com-		„ Acid, action of, on or-	
pounds ....	7, 86	ganic compounds ....	7, 126
„ Lime ....	4, 153	„ Acid, Hydrochlorate of	4, 137
„ Lime and Potash....	4, 154	„ Acid, Hydrofluante ....	4, 139
„ Lithia ....	4, 153	„ Acid, Nitrate of ....	4, 140
„ Magnesia ....	4, 154	„ Acid, solubility of, in	
„ Magnesia and Pot-		alcohol ....	8, 269
ash ....	4, 154	„ Acid, Sulphate of ? ....	4, 128
„ Magnesium-chlo-		„ Arseniate ....	4, 312
ride ....	4, 154	„ Borate ....	4, 122
„ Manganous oxide....	4, 247	„ Bromate ....	4, 130
„ Mercuric oxide ....	6, 114	„ Carbonate ....	4, 122
„ Mercurous oxide ....	6, 113	„ Chrysammate ....	12, 5
„ Methylstrychnine	17, 509	„ Citrates ....	11, 453
„ Molybdic acid ....	4, 156	„ Cyanide ....	7, 419
„ Nickel-oxide ....	5, 387	„ Formiate ....	7, 279
„ Nitroharmaline ....	16, 124	„ Hydrate, reaction of,	
„ Nitroharmine ....	16, 111	with Tannic Acid ....	15, 466
„ Paricine ....	17, 572	„ Hyposulphate....	4, 125
„ Pelosine ....	17, 26	„ Iodate ....	4, 130
„ Platinic oxide ....	6, 331	„ Lactate ....	11, 486
„ Potash ....	4, 144	„ Metaphosphate ....	4, 123
„ Potash with Cyan-		„ Molybdate ....	4, 156
ide of Mercury ....	8, 23	„ Nitrate ....	4, 140
„ Potash with Sul-		„ Oleate ....	17, 72
phate of Pot-		„ Oxalate ....	9, 137
ash ....	4, 150	„ Oxide....	4, 108
„ Potassium-chloride	4, 150	„ Oxide, with Ferric ox-	
„ Quinine ....	17, 284	ide ....	5, 299
„ Sal-ammoniac ....	4, 143	„ Oxide, with Ferrous	
„ Silica ? ....	4, 155	oxide ....	5, 298
„ Silver-oxide ....	6, 184	„ Oxide, with Fluxes ....	4, 152

Chromic oxide, Hydrated ....	4, 112	Chromium Sulphocarbonate ....	4, 129
„ Oxide, reactions of, with		„ Sulphocyanide ....	8, 85
organic acids ....	7, 209	„ Sulphomolybdate ....	4, 156
„ Phosphate ....	4, 123	„ Terfluoride of, with	
„ Phosphite ....	4, 123	Ammonia ....	4, 143
„ Pyrophosphate ....	4, 123	„ Tersulphide of, with	
„ Racemate ....	10, 355	Hydrosulphate of	
„ Saccharate ....	11, 519	Ammonia ....	4, 142
„ Salts ....	4, 113	„ and Iron, Carbide of	5, 300
„ Selenite ....	4, 129	„ and Iron, Cyanides of	7, 487
„ Stannate ? ....	5, 101	„ and Iron, Oxides of	5, 298
„ Succinate ? ....	10, 123	„ and Iron, Sesquioxide	
„ Sulpharsenate ....	4, 313	of, with Protoxide	
„ Sulpharsenite ....	4, 312	of Iridium ....	6, 425
„ Sulphate ....	4, 125	„ and Lead, Tartrate of	10, 313
„ Sulphite ....	4, 125	„ and Potassium, Sul-	
„ Tartrate ....	10, 294	phide of ....	4, 147
„ Tellurate ....	4, 426	„ and Silicium, Fluoride	
„ Tellurite ....	4, 426	of ....	4, 156
„ Tungstate ....	4, 156	Chromoso-chromic Oxide ....	4, 107
Chromico-ammonic Carbonate ....	4, 142	Chromosopotassic Sulphate ....	4, 147
„ „ Sulphate ....	4, 142	Chromous Acetate ....	8, 305
„ -potassic Carbonate ....	4, 147	„ Benzoate ....	12, 40
„ „ Pyrophosphate	4, 147	„ Borate ....	4, 122
„ „ Sulphate ....	4, 147	„ Carbonate ....	4, 121
„ -sodic Sulphate ....	4, 152	„ Cyanide ....	7, 419
Chromidecyanide of Cobalt ....	7, 495	„ Oxide ....	4, 106
„ Potassium ....	7, 420	„ Phosphate ....	4, 123
„ Silver ....	8, 31	„ Salts ....	4, 107
„ Lead ? ....	7, 428	„ Succinate ....	10, 123
„ Zinc ....	7, 425	„ Sulphate ....	4, 125
Chromide of Manganese ....	4, 247	„ Sulphite ....	4, 124
Chromite of Ammonia ....	4, 140	Chryiodin ....	12, 13
„ Magnesia ....	4, 154	Chrysammates, metallic	12, 3-7
„ Potash ....	4, 144	Chrysammic acid ....	12, 1
„ Soda ....	4, 151	Chrysammide ....	12, 7
Chromium ....	4, 105	Chrysanilates ....	12, 331
„ Bromide ....	4, 130	Chrysanic acid ....	12, 329
„ Brown Nitrate ....	4, 140	Chrysanisate of Ethyl....	12, 303
„ Brown Oxide ....	4, 113	Chrysanisates, metallic	12, 302
„ Chlorides ....	4, 130	Chrysanisic acid ....	12, 302
„ Fluorides ....	4, 137	Chrysatric acid ....	12, 12
„ Iodide ....	4, 129	Chrysene ....	15, 1
„ Nitride ....	4, 139	Chryshæmatin, <i>see</i> Hæmatoxylin.	
„ Oxides ....	4, 106	Chrysindamide....	12, 15
„ Oxychloride ....	4, 134	Chrysindide of Ammonium oxide	12, 15
„ Persulphomolybdate	4, 156	<i>Chrysitis</i> ....	5, 109
„ Phosphide ....	4, 122	Chrysoberyl ....	3, 329
„ Sesquichloride, solu-		Chrysocolla ....	5, 465
bility of, in alcohol	8, 269	Chrysocolla, Plinius' ....	3, 87
„ Sesquifluoride of, with		Chrysogen ....	18, 172
Fluoride of Potas-		Chrysoharmine, <i>see</i> Nitroharma-	
sium ....	4, 151	line ....	18, 122
„ Sesquifluoride of, with		Chrysoidin ....	16, 521
Fluoride of Sodium	4, 152	Chrysolite ....	3, 395
„ Sesquifluoride of, with		Chrysophanates ....	16, 175
Hydrofluat of Am-		Chrysophane ....	3, 462
monia ....	4, 143	Chrysophanic acid	16, 171 ; 18, 241
„ Sulphides ....	4, 123	Chrysorhamninn ....	16, 75



Chylariose ....	15, 336	Cinchonidine Hydrochlorate ....	17, 225
Cicutine ....	18, 192		228, 612
Cider-vinegar ....	8, 284	„ Hydroferrocyanate	17, 613
Cimicate of Ethyl ....	16, 286	„ Hydrofluat	17, 225
Cimicates, metallic ....	16, 284	„ Hydrosulphocyanate	17, 227
Cimicic acid ....	16, 284	„ Hypophosphite ....	17, 611
Cimicyl chloride ....	16, 286	„ Hyposulphite	17, 224, 611
Cimolite ....	3, 419	„ Iodomercurate ....	17, 226
Cinacrol ....	14, 322	„ Kinat	17, 227
Cinaebene ....	14, 319	„ Nitrate	17, 225, 229, 613
„ Hydrated ....	14, 320	„ Oxalate ....	17, 227, 613
„ Hydriodate ....	14, 320	„ Phosphate....	17, 223
Cinaephene ....	14, 321	„ Succinate ....	17, 614
Cinaphane ....	14, 318	„ Sulphate	17, 224, 228, 611
Cinaphene ....	14, 319	„ Tartrate	17, 227, 229, 614
Cinchona-bark, estimation of qui-		„ and Antimony, tar-	
nine and cincho-		trate of ....	17, 614
nine in ....	17, 268	„ Valerate ....	17, 227
„ occurrence of kino-		Cinchonidine, solutions of	17, 223, 227, 615
vin in ....	18, 26	Cinchonine, decompositions of....	17, 202
„ occurrence of qui-		„ estimation of, in	
nidine in ....	17, 296	cinchona-bark ....	17, 268
„ preparation of Ki-		„ estimation of, in its	
nic acid from ....	16, 223	salts ....	17, 205
„ preparation of		„ history, sources, pre-	
quinine and cin-		paration ....	17, 200
chonine from ....	17, 264	„ memoirs relating to	17, 199
„ proportions of		„ properties of ....	17, 201
quinine and cin-		Cinchonine - salts ....	17, 205
chonine in ....	17, 264	„ Acetate ....	17, 216
„ tannic acids from	15, 479	„ Antitartrate ....	17, 217
„ yellow, phloba-		„ Arseniate ....	17, 211
phene from ....	15, 495	„ Aspartate....	17, 216
Cinchona-bases, compounds of,		„ Benzoate ....	17, 219
with iodine and sul-		„ Bihydriodate ....	17, 610
phuric acid....	17, 311	„ Carbonate....	17, 206
„ -red ....	15, 482	„ Chlorate ....	17, 208
„ -red, with quinine ....	17, 293	„ Chloroaurate	17, 213, 610
„ -resin ....	17, 263	„ Chlorocadmate ....	17, 211
Cinchonatannic Acid ....	15, 479	„ Chloromercurate ....	17, 212
Cinchona-trees, East Indian, kino-		„ Chloroplatinate ....	17, 212
vic acid in ....	18, 24	„ Chlorostannite ....	17, 211
Cinchona-yellow ....	17, 314	„ Chromate ....	17, 211
Cinchonicine ....	17, 230	„ Citrate ....	17, 218
Cinchonidine ....	13, 336	„ Croconate....	17, 218
„ (Pasteur's)	17, 220, 610	„ Cyanoplatinate ....	17, 214
„ (Wittstein's) ....	17, 228	„ Cyanurate....	17, 216
Cinchonidine-salts	17, 223, 229, 611	„ Dextrotartrate ....	17, 217
„ Acetate	17, 227, 229, 613	„ Formiate ....	17, 216
„ Benzoate ....	17, 615	„ Hippurate....	17, 219
„ Butyrate ....	17, 227	„ Hydriodate ....	17, 208
„ Chlorate ....	17, 224	„ Hydriodate, with	
„ Chloroaurate ....	17, 613	Cyanide of Mercury	17, 214
„ Chloromercurate ....	17, 226	„ Hydrobromate, with	
„ Chloroplatinate	17, 226, 613	Cyanide of Mercury	17, 214
„ Citrate ....	17, 227, 614	„ Hydrochlorate ....	17, 209
„ Formiate ....	17, 227	„ Hydrocyanate ....	17, 213
„ Hippurate ....	17, 227	„ Hydroferricyanate	17, 214
„ Hydriodate (bi) ....	17, 612	„ Hydroferrocyanate	17, 213

Cinchonine, Hydrofluat	....	17, 210	Cinnamol	....	13, 1
„ Hydrosulphocyanate	....	17, 215	Cinnamomin	....	13, 1
„ Hyposulphate	....	17, 206	Cinnamon, bitter of white	....	18, 244
„ Hyposulphite	....	17, 206	„ oil, iodine, and iodide		
„ Iodate	....	17, 206	„ of potassium, com-		
„ Iodomercurate	....	17, 211	„ pound of	....	13, 267
„ Kinat	....	17, 220	„ oil of	....	13, 258
„ Mellitate	....	17, 216	„ oil, resins from	....	13, 264
„ Nitrate	....	17, 210	„ -leaves, oil of, from		
„ Oxalate	....	17, 216	„ Ceylon	....	14, 210
„ Oxalurate	....	17, 216	Cinnamyl Chloride	....	13, 294
„ Perchlorate	....	17, 209	„ Cyanide	....	13, 299
„ Periodate	....	17, 208	„ Hydride	....	13, 258
„ Phosphantimonate	....	17, 211	Cinnanilide	....	13, 303
„ Phosphate	....	17, 206	Cinnanitransidine	....	13, 304
„ Picrate	....	17, 219	<i>Cipo de Cananum</i> , phosphores-		
„ Rhodizonate	....	17, 218	„ cence of the milky juice of	....	1, 188
„ Roccellate	....	17, 220	Circular polarisation, develop-		
„ Succinate	....	17, 216	„ ment of, by the ac-		
„ Sulphate	....	17, 206	„ tion of magnetism		
„ Tartrate	....	17, 216	„ on the electric cur-		
„ Tartrate, formation			„ rents	....	1, 168
„ of racemic acid			„ polarisation in organic		
„ from	....	10, 347	„ liquids	....	7, 54
„ Urate	....	17, 218	Cissotannic acid	....	15, 516
Cinchonine, solutions of	....	17, 205, 220	<i>Cisticus creticus</i> , resin of	....	17, 422
„ -sulphuric Acid	....	17, 232	Citracobinitranil	....	11, 322
Cinchonine and Antimony tar-			Citracobinitranilic acid	....	11, 325
„ trate of	....	17, 218	Citraconodinitranil	....	11, 322
„ and Quinine, prepa-			Citraconamide	....	10, 436
„ ration of	....	17, 264	Citraconanil	....	11, 321
„ and Quinine, pro-			Citraconanilic acid	....	11, 323
„ portions of in cin-			Citraconates, metallic	....	10, 419
„ chona bark	....	17, 264	Citraconazophenylimide	....	11, 326
„ and Quinine, purifi-			Citraconic acid	....	10, 417
„ cation of	....	17, 265	„ anhydride	....	10, 435
<i>Cineres clavellati depurati</i>	....	3, 14	„ ether	....	10, 423
Cinnabar	....	6, 19	Citraconimide	....	10, 437
Cinnamate of Ethyl	....	13, 281	Citraconodianil	....	11, 322
„ Methyl	....	13, 281	Citraconyl and Phenyl, nitride		
„ Styacin	....	13, 289	„ of	....	11, 321
Cinnamates, metallic	....	13, 273	Citramide	....	11, 465
Cinnamein	....	13, 283	Citraniolate of Aniline	....	11, 467
Cinnamene	....	13, 1	„ Silver	....	11, 466
„ Bromide	....	13, 15	Citraniolic acid	....	11, 465
„ Chloride	....	13, 16	Citraniolide	....	11, 469
Cinnamic acid	....	13, 268	Citrate of Alumina	....	11, 452
„ acid, chlorinated oil			„ of Ammonia	....	11, 445
„ from	....	13, 297	„ Ammonio-ferrie	....	11, 457
„ alcohol	....	13, 286, 256	„ Ammonio-mercuric	....	11, 460
„ aldehyde	....	13, 258	„ Ammonio-mercurous	....	11, 460
„ aldehyde, compound			„ of Aniline	....	11, 462
„ of, with alkaline bi-			„ Argentie	....	11, 461
„ sulphites	....	13, 263	„ Argentous	....	11, 461
„ aldehyde, Hydrochlo-			„ of Baryta	....	11, 448, 449
„ rate of	....	13, 262	„ Cadmium	....	11, 454
„ aldehyde, Nitrate of	....	13, 262	„ Cerous	....	11, 452
„ anhydride	....	13, 292	„ of Chromium	....	11, 453
„ ether	....	13, 281	„ Cinchonidine	....	17, 227, 614

Citrates of Cinchonine ....	17, 218	Clay ....	3, 415
„ Cobalt ....	11, 458	„ ferruginous, occurrence of	
„ Cupric ....	11, 459	humus in ....	17, 460
„ of Ethyl ....	11, 463	Cleavage of Crystals ....	1, 18, 147
„ Ferric ....	11, 458	Clematidin ....	18, 215
„ Ferrous ....	11, 457	Cloud, formation of ....	1, 288
„ of Glucina ....	11, 452	Clove-cinnamon, Brazilian, vola-	
„ Lead ....	11, 455, 457	tile oil of ....	14, 210
„ Lime ....	11, 450, 451	„ -oil, stearoptene of ....	14, 187
„ Lithia ....	11, 448	Cloves, indifferent or neutral oil of	14, 285
„ Magnesia ....	11, 451	„ oil of ....	14, 209
„ Manganese ....	11, 453	Cnicin ....	16, 97
„ Mercuric ....	11, 460	Coal, Boghead Cannel, Alcohol-	
„ Mercurous ....	11, 459	radicals from ....	13, 386
„ of Methyl ....	11, 462	„ destructive distillation of	
„ Nickel ....	11, 409	7, 82; 15, 154	
„ Palladium ....	11, 461	„ -tar camphor, <i>see</i> Naph-	
„ Potash ....	11, 446	thalin.	
„ Potash and Ammonia....	11, 446	„ -tar, constituents of ....	15, 155
„ Potassio-antimonie ....	11, 453	„ -tar, light oil of ....	11, 135
„ of Quinine ....	17, 292, 616	„ -tar naphtha, heavy ....	11, 135
„ Silver ....	11, 460	„ -tar naphtha, light ....	11, 135
„ Silver and Calcium ....	11, 461	„ -tar naphtha, preparation	
„ Soda ....	11, 447	of Cumene from ....	13, 339
„ Soda and Ammonia....	11, 448	„ -tar, preparation of Aniline	
„ „ Potash ....	11, 448	from ....	11, 247
„ Sodio-ferric ....	11, 458	„ -tar, preparation of Ben-	
„ Telluric ....	11, 454	zene from ....	11, 134
„ of Strontia ....	11, 449, 450	„ -tar, preparation of Carbolic	
„ Uranium ....	11, 453	acid from ....	11, 145
„ Thorina ....	11, 452	„ -tar, preparation of Pico-	
„ Vanadium ....	11, 452	line from ....	11, 264
„ Yttria ....	11, 452	„ -tar, Reichenbach's Chole-	
„ Zinc ....	11, 454	sterin from ....	18, 122
„ Zirconium ....	11, 452	Coarse Copper ....	5, 398
Citrene ....	14, 304	„ Metal ....	5, 398
Citric acid ....	11, 436	Cobalt, Acetates ....	8, 322
„ hydrates ....	11, 442	„ Alloxanate ....	10, 167
„ preparation of Aco-		„ Alloys ....	5, 354
nitic acid from ....	11, 403	„ Aluminate ....	5, 345
Citric ether ....	11, 463	„ Amalgam ....	6, 129
Citrilene ....	14, 304	„ Ammonio-bromide ....	5, 340
Citrobianil ....	11, 467	„ Ammonio-chloride ....	5, 342
Citrobianilate of Aniline	11, 469	„ Ammonio-iodide ....	5, 340
Citrobianilic acid ....	11, 468	„ Ammonio-sesquibro-	
Citrobiglycerin ....	13, 582	mide? ....	5, 341
Citromannitan ....	15, 378	„ -oxide, Ammonio-sul-	
Citronyl, <i>see</i> Citrene.		phate ....	5, 339
<i>Citrus Lumia</i> , volatile oil of	14, 509	„ Ammonio-sulphocyanide	8, 89
Citryl Hydrochlorate ....	14, 301	„ Antimoniate ....	5, 353
„ Oxychloride ....	11, 470	„ Antimonite ....	5, 353
Citrylene Hydrochlorate	14, 301	„ Arseniate ....	5, 349
<i>Cladonia rangiferina</i> , prepara-		„ Arsenite ....	5, 349
tion of Usnic acid from ....	17, 48	„ Amylosulphate ....	11, 59
Classification of Organic Com-		„ Antimonide ....	5, 353
pounds ....	7, 147	„ Argentocyanide ....	8, 32
„ of Organic Com-		„ Arsenide ....	5, 348
pounds accord-		„ Arsenide of, with sul-	
ing to Laurent	7, 23	phide of cobalt ....	5, 351



Cobalt,	Benzoate	....	....	12,	43
„	Bisulphide	....	....	5,	332
„	Borate	....	....	5,	329
„	Bromate	....	....	5,	336
„	Bromide	....	....	5,	335
„	Carbonate	....	....	5,	328
„	Chlorate	....	....	5,	337
„	Chloride	....	....	5,	336
„	Chloride of, with cyanide of mercury	....	....	8,	26
„	Chloroplatinate	....	....	6,	337
„	Chromate	....	....	5,	347
„	Chromidcyanide	....	....	7,	495
„	Cinnamate	....	....	13,	277
„	Citrate	....	....	11,	458
„	Cobaltidcyanide	....	....	7,	497
„	Croconate	....	....	10,	394
„	Cyanides	....	....	7,	492
„	Earthy	....	....	4,	195, 204
„	Ferridcyanide	....	....	7,	497
„	Ferrocyanide	....	....	7,	496
„	Fluoride	....	....	5,	337
„	with Fluxes	....	....	5,	344
„	Formiate	....	....	7,	281
„	Fumarate	....	....	10,	29
„	Gallate	....	....	12,	410
„	Hippurate	....	....	12,	80
„	Hypophosphite	....	....	5,	330
„	Hyposulphate	....	....	5,	333
„	Hyposulphite	....	....	5,	333
„	Iodite	....	....	5,	335
„	Iodide	....	....	5,	335
„	Kinate	....	....	16,	232
„	Lactate	....	....	11,	492
„	Leucate	....	....	15,	62
„	Mellitate	....	....	10,	9
„	Metaphosphate	....	....	5,	331
„	Molybdate	....	....	5,	347
„	Nitrate	....	....	5,	338
„	Oleate	....	....	17,	72
„	Oxalate	....	....	9,	160
„	Oxides	....	....	5,	322
„	Oxyfluoride	....	....	5,	338
„	Oxyiodide	....	....	5,	335
„	Oxysulphide	....	....	5,	332
„	Persulphomolybdate	....	....	5,	347
„	Phosphates	....	....	5,	330
„	Phosphide	....	....	5,	329
„	Phosphite	....	....	5,	330
„	Picrate	....	....	11,	225
„	Platinocyanide of, with ammonia	....	....	8,	55
„	Protosulphide	....	....	5,	331
„	Pyrophosphate	....	....	5,	331
„	Pyrotartrate	....	....	11,	97
„	Racemate	....	....	10,	358
„	reactions of	....	....	5,	324
„	reduced by hydrogen, effect of, in inducing				

	the combination of	of		
	hydrogen and oxygen		2,	53
Cobalt,	Rhodizonate	....	....	10, 403
„	Seleniate	....	....	5, 334
„	Selenide	....	....	5, 334
„	Selenite	....	....	5, 334
„	separation of, from man-			
	ganese	....	....	5, 321
„	separation of, from			
	nickel	....	5,	319, 360
„	Sesquisulphide	....	5,	332
„	Silicate	....	5,	345
„	Stannate	....	5,	354
„	Styphnate	....	11,	234
„	Suberate	....	13,	211
„	Succinate	....	10,	127
„	Sulphantimoniate	....	5,	353
„	Sulpharsenite	....	5,	351
„	Sulphate	....	5,	333
„	Sulphides	....	5,	331
„	Sulphide of, with arse-			
	nide of cobalt	....	5,	351
„	Sulphite	....	5,	333
„	Sulphocarbonate	....	5,	334
„	Sulphocyanide	12, 499; 8,	89	
„	Sulphomolybdate	....	5,	347
„	Sulphotellurite	....	5,	353
„	Sulphotungstate	....	5,	346
„	Sulphovinate	....	8,	427
„	Tellurate	....	5,	353
„	Tellurite	....	5,	353
„	Tungstate	....	5,	346
„	Valerate	....	11,	36
„	Vanadate	....	5,	347
„	and Ammonium, Car-			
	bonate of	....	5,	339
„	and Ammonium, Fluo-			
	ride of	....	5,	342
„	and Ammonium, Iodate			
	of	....	5,	340
„	and Ammonium, Nitrate			
	of	....	5,	342
„	and Ammonium, Sul-			
	phate of	....	5,	340
„	and Calcium, Hypophos-			
	phate of	....	5,	344
„	and Copper, Sulphate			
	of	....	5,	496
„	and Gold, alloy of	....	6,	246
„	„ chloride of	....	6,	246
„	and Iron, alloy of	....	5,	354
„	and Nickel, alloy	....	5,	397
„	and Mercury, chloride			
	of	....	6,	129
„	and Nickel, cyanide of		7,	500
„	„ tartrates of,		10,	320
„	„ double salts			
„	of, with tartrate of			
	potassium	....	10,	320

Cobalt and Potassium, carbonate of ....	5, 343	Cobaltous Oxide with Zinc-oxide	5, 353
„ and Potassium, fluoride of ....	5, 344	„ Salts....	5, 324
„ and Potassium, racemate of ....	10, 358	„ „ reaction of with Tannic acids	15, 470
„ and Potassium, sulphate of ....	5, 344	„ „ solubility of in alcohol	8, 271
„ and Silicium, hydrated fluoride of ....	5, 345	Cobalt-speiss, preparation of nickel from ....	5, 355
„ and Sodium, carbonate of ....	5, 344	<i>Cobaltum</i> ....	5, 316
„ and Sodium, metaphosphate of ....	5, 344	„ of the druggists	4, 249
„ and Tin, alloy of ....	5, 354	Cobalt-uranic Acetate ....	13, 445
„ and Zinc, alloy of ....	5, 353	„ -vitriol ....	5, 333
„ „ sulphate of ....	5, 354	Cocaine ....	16, 306
„ -bloom ....	5, 349	Cocatannic Acid ....	15, 518
„ -coating ....	5, 349	Coca-wax ....	18, 159
„ -glance ....	5, 351	Cocculus-grains, brown acid from the husks of ....	14, 477
„ -glass ....	5, 346	„ „ fat of ....	16, 389
Cobaltic acid ? ....	5, 328	<i>Cocculus indicus</i> , preparation of menispermine from the berries of ....	17, 52
„ oxide ....	5, 326	Cochineal fat ....	16, 389
„ „ hydrate ....	5, 327	„ preparation of carminic acid from ....	16, 205
„ salts ....	5, 328	„ preparation of tyrosine from ....	13, 360
Cobaltidcyanide of Ammonium....	7, 493	„ -red ....	16, 205
„ Barium ....	7, 495	Cocinyl, Hydride, <i>see</i> Tridecatyl, hydride ....	16, 532
„ Cadmium ....	7, 495	Cockchafers, occurrence of gum in ....	15, 196
„ Cobalt ....	7, 497	Cocoa-fat or butter ....	16, 389
„ Copper ....	8, 10	„ -nut fat, caprylic acid in	13, 190
„ Iron ....	7, 497	„ „ preparation of caproic acid from ....	11, 415
„ Lead ....	7, 495	„ „ oil ....	16, 389
„ „ with Oxide of Lead....	7, 496	Coculostearic Acid ....	16, 365
„ Manganese ....	7, 495	Codamine ....	18, 192
„ Mercury ? ....	8, 26	Codeine ....	17, 27
„ Nickel ....	7, 500	„ bihydrated ....	17, 31
„ Potassium ....	7, 494	„ compound of with Iodine	17, 32
„ Silver ....	8, 32	„ salts ....	17, 32
„ Sodium ....	7, 494	Cod-liver oil ....	16, 323
„ Tin....	7, 495	Cœlestine ....	3, 174
„ Zinc ....	7, 495	Coffee-beans, preparation of caffe-tannic acid from	15, 505
Cobaltine ....	5, 348	„ preparation of kinic acid from	16, 224
Cobaltite of Magnesia ....	5, 345	Coffee fat ....	16, 390
„ Potash ....	5, 343	„ oil ....	14, 366
„ Soda ....	5, 344	„ preparation of caffeine from ....	13, 225
Cobalto-bromate of Ammonia?....	5, 341	Cohesion ....	1, 6—8
„ -hyposulphate of Ammonia....	5, 339	„ increased by pressure ....	1, 112
„ -nitrate of Ammonia ....	5, 342	„ influence of, on decomposition....	1, 112
Cobaltoso-cobaltic Oxalate ....	9, 161	„ variations in the force of, produced by heat	1, 112, 113
„ „ Oxide ....	5, 326		
„ -cupric Sulphate ....	5, 496		
Cobalt-pyrites ....	5, 332		
„ -speiss ....	5, 388		
Cobaltous Oxide ....	5, 322		
„ hydrated ....	5, 323		
„ with Peroxide of Manganese ....	5, 347		

- Cohesive powers, bodies classed according to .... 1, 7  
 Cohobation .... 1, 288  
 Coke, preparation of, by dry distillation of coal .... 7, 82  
 Colchicine .... 17, 604  
 Colchicine .... 17, 601  
 Colcothar .... 5, 195  
 Cold produced by vaporization 1, 272  
 „ production of, by chemical action .... 1, 297  
 „ radiation of .... 1, 213  
 „ -short bar iron .... 5, 205  
 „ water, substances more soluble in, than in hot .... 1, 113  
*Colle d'Amidon* .... 15, 95  
 Collidine .... 13, 148  
 Colloïdal condition of sucrates .... 15, 538  
 Collyrite .... 3, 411  
 „ of Weissenfels .... 3, 413  
 Colocynth, resin of .... 17, 558  
 Colocynthein .... 17, 556  
 Colocynthin .... 15, 342; 17, 556  
 Colocynthitin .... 17, 558  
 Colombo-root, preparation of berberine from .... 17, 187  
 Colophan .... 17, 421  
 Colophene .... 14, 279  
 „ from Camphor .... 14, 280  
 Colophony .... 18, 9  
 „ preparation of Sylvic acid from .... 17, 319  
 Colour of a compound, law of Persoz respecting .... 1, 96  
 „ dispersion of .... 1, 164  
 „ of flame.... .... 2, 30  
 Coloured fabrics, bleaching of, by exposure to sunshine 7, 95  
 „ effects of heat on.... .... 7, 96  
 Colouring matter (green) of oysters .... 18, 422  
 „ in the mantle of the black dew-snail .... 18, 419  
 „ (purple) formed on mouldy bread, potatoes, meat, &c. .... 18, 421  
 „ of *Rottlera tinctoria* .... 17, 378  
 „ of the sea-owl or lump fish (*Aplysia depilans*) .... 18, 421  
 Colouring matters of birds' feathers .... 18, 419  
 Colouring matters of crabs and lobsters .... 18, 420  
 „ of plants, blue and red .... 16, 522  
 „ yellow .... 16, 513  
 „ of urine .... 18, 407  
 Colour-makers' composition .... 5, 88  
 Colours of bodies, effect of heat on.... .... 1, 238  
 „ flowers, alteration of, by exposure to light 1, 170, 171  
 „ organic compounds 7, 64  
 Columbic acid .... 17, 529  
 Columbin .... 17, 528  
 Columbite .... 4, 19; 5, 292  
 Columbium .... 4, 1  
 Colza oil .... 17, 554  
 Combination attended with development of electricity .... 1, 39  
 „ attended with development of heat 1, 38  
 „ attended with development of light 1, 181  
 „ alteration in density caused by .... 1, 64  
 „ Berthollet's theory of .... 1, 149  
 „ change of volume attending 1, 64—86  
 „ circumstances and results of .... 1, 38  
 „ conditions necessary for .... 1, 35  
 „ crystallisation effected by .... 1, 8—12  
 „ definition of 1, 33—149  
 „ how produced .... 1, 149  
 „ induced by affinity 1, 154  
 „ induced by communication of chemical energy 1, 38  
 „ induced by electric attraction.... 1, 154  
 „ induced by universal attraction .... 1, 153  
 „ influence of affinity on .... 1, 35—154  
 „ influence of cohesion on.... .... 1, 6  
 „ influence of condensation on .... 1, 37  
 „ influence of contact on.... .... 1, 36  
 „ influence of electricity on .... 1, 37  
 „ influence of expansion on.... .... 1, 37



Combination, influence of light				Combustion, imperfect, formation			
on ....	1,	37		of humus by ....	17,	460	
influence of liquid-				memoirs relating to	2,	19	
ity or gaseity on	1,	36		in oxygen, table of			
influence of pre-				the quantities of			
sence of other				heat evolved by ....	1,	292	
bodies on ....	1,	37		spontaneous, of fixed			
influence of tem-				oils ....	7,	242	
perature on ....	1,	36		supporters of ....	2,	18	
laws relating to....	1,	41		theories of ....	2,	35	
mechanical ....	1,	20		-tube for ultimate			
and mixture, dif-				analysis of organic			
ference between	1,	149		compounds ....	7,	86	
of ponderable				Comenamate of ethyl ....	11,	395	
bodies, develop-				Comenamic acid ....	11,	393	
ment or absorp-				Comenates, metallic ....	11,	384—388	
tion of heat ac-				Comenic acid ....	11,	382	
companying ....	1,	291		Comferin ....	18,	84	
qualitative altera-				Common salt ....	3,	110	
tions of elements				Commercial Carbonate of Ammo-			
caused by	1,	64—111		nia, impurities in	2,	432	
theories of	1,	148—159		Common salt, preparation of car-			
time in which it				bonate of soda			
takes place ....	1,	38		from ....	3,	79	
Combinations, accompanied by				traces of mercury			
decompositions,				in ....	6,	2	
electricity de-				Compact manganese ....	4,	203	
veloped by ....	1,	340		Compound atoms ....	1,	42, 147	
brought about by				bodies, heat developed			
electrical influ-				in the combination of	1,	294	
ence ....	1,	429		radicals ....	7,	10	
chemical, accom-				Compounds, amorphous ....	1,	102	
panied by decom-				atomic weights of....	1,	59	
positions pro-				chemical relations of	1,	96	
duced by the				colour of ....	1,	96	
agency of light	1,	170		crystalline forms of			
chemical, produced				1, 87—93			
by the agency of				decomposition of	1,	111—145	
light ....	1,	170		density of....	1,	65—86	
Combining volumes of gases ....	1,	66		differences of pro-			
weights or propor-				perties in, due to			
tions ....	1,	42		different modes of			
Combustibles ....	2,	19		arrangement of the			
Combustion ....	1,	181 ; 2, 24		component atoms	1,	98, 108	
cause of the develop-				division of, into or-			
ment of heat and				ganic and inor-			
light in ....	2,	36		ganic ....	2,	2	
conditions of ....	2,	24		and their elements,			
conditions of con-				relations between			
tinuity of....	2,	32		the densities of ....	1,	55, 67	
decomposition of				formation of	1,	35—111	
organic compounds				formation of, accord-			
by ....	7,	84		ing to Persoz's law	1,	96	
development of elec-				formed by absorp-			
tricity by ....	1,	329		tion ....	1,	86	
electrochemical				formed by conden-			
theory of....	2,	37		sation ....	1,	84	
extinction of ....	2,	33		formed by mixture	1,	86	
of glycerides ....	7,	241		formed by solution	1,	86	

- Compounds formed by substitution .... 1, 37  
 „ fusibility of .... 1, 93  
 „ heat-capacity of the atoms of .... 1, 248  
 „ isodimorphous .... 1, 99  
 „ isomeric .... 1, 108  
 „ isomorphous .... 1, 87  
 „ liquid and solid, table of specific heats of .... 1, 244  
 „ metameric .... 1, 110  
 „ physiological relations of .... 1, 96  
 „ polymeric .... 1, 109  
 „ refractive powers of .... 1, 94  
 „ relations of, to heat .... 1, 93  
 „ relations of, to light .... 1, 94  
 „ state of aggregation of .... 1, 86  
 „ transparency of .... 1, 94  
 „ volatility of .... 1, 93  
 Composition, colour-makers' .... 5, 88  
 Compressibility of liquids .... 1, 257  
 Compression, heat developed by .... 1, 300  
 Comptonite .... 3, 433  
 Conchicine (of Hesse) .... 17, 610  
 Conchiolin .... 18, 371  
 Conchoïdal Augite .... 3, 429  
 Condensation: its influence on chemical combination .... 1, 37, 86  
 Condenser, electrical .... 1, 318  
 Condensing apparatus .... 1, 288  
 Conducting power of bodies for electricity of small tension, methods of determining .... 1, 313  
 Conduction of heat .... 1, 221  
 Conductors of electricity .... 1, 310  
 „ of electricity, bipolar .... 1, 462  
 „ and Insulators, electric, difference between .... 1, 313  
 „ polar, of voltaic battery .... 1, 431  
 Conessine .... 17, 594  
 Confervæ, phosphorescence of .... 1, 189  
 Conglutin .... 18, 434  
 Conhydrine .... 13, 169  
 Conine .... 13, 159  
 Conine, salts of .... 13, 165—167  
*Conium maculatum*, ferment-oil of .... 14, 405  
 Connective tissue, preparation of mucin from .... 18, 341  
 Conring .... 1, 4  
 Constant of primary Nuclei .... 7, 23  
 Constitution of atoms .... 1, 146  
 Contact, influence of, on chemical combination .... 1, 36  
 Contact, influence of, on decomposition .... 1, 115  
 Contact-theory of galvanism .... 1, 510  
 Contraction accompanying solidification .... 1, 256  
 Convallamaretin .... 16, 221  
 Convallamarin .... 15, 342; 16, 220  
 Convallaretin .... 16, 219  
 Convallarin .... 15, 342; 16, 219  
 Convolvulates .... 16, 157  
 Convolvulic acid .... 16, 156  
 Convolvulin .... 15, 342; 16, 154  
 Convolvulinol .... 16, 153  
 Convolvulinolic acid .... 16, 152  
 Convolvulin-sugar .... 15, 343  
*Convolvulus scoparius*, oil of .... 14, 363  
 Copahilene, hydrochlorate .... 14, 288  
 Copaiba balsam .... 17, 327  
 „ oil .... 14, 286  
 Copaivic acid .... 17, 326  
 Copal .... 17, 405  
 Copalche bark, bitter alkaloid from .... 17, 314  
 „ bark, bitter principle of .... 18, 230  
 Copalin .... 17, 436  
 Copper .... 5, 398  
 „ Amalgam of .... 6, 131  
 „ Amidobenzoate .... 12, 146  
 „ Ammonio - cobaltidcyanide .... 8, 11  
 „ Ammonio-dibromide .... 5, 452  
 „ Ammonio-dichloride .... 5, 453  
 „ Ammonio-diniodide .... 5, 450  
 „ Ammonio-ferrocyanide .... 8, 9  
 „ Ammonio-maleate .... 8, 159  
 „ Ammonio-protiodide .... 5, 451  
 „ Ammonio-protobromide .... 5, 452  
 „ Ammonio-protoclchloride .... 5, 453  
 „ Antimonide .... 5, 474  
 „ Argentocyanide? .... 8, 33  
 „ Arsenide .... 5, 470  
 „ black oxide of .... 5, 406  
 „ blue or indigo .... 5, 420  
 „ Borofluoride .... 5, 443  
 „ Bromides .... 5, 435  
 „ Carbide .... 5, 414  
 „ Carbosulphide? .... 5, 430  
 „ Chlorides .... 5, 438  
 „ Cobaltidcyanide .... 8, 10  
 „ -compounds .... 5, 402  
 „ -compound of Allantoin .... 10, 263  
 „ -compound of Alanine .... 9, 437  
 „ -compound of Salhydramide .... 12, 347  
 „ -compound of Santonin .... 16, 256  
 „ -compound of Verantin .... 16, 59  
 „ Cuprocyanide .... 8, 10  
 „ Dibromide .... 5, 435

Copper	Dichloride	....	....	5, 438		of oxygen and hydro-			
"	Dicyanide	....	....	8, 1		gen	....	....	2, 52
"	Diffuoride	....	....	5, 442	Copper	rust	....	....	5, 414
"	Diniiodide	....	....	5, 433	"	Salts, <i>see</i> Cupric and			
"	Dioxide	....	....	5, 403	"	Cuprous Salts.			
"	Diselenide	....	....	5, 432	"	" solubility of, in			
"	Disulphide	....	....	5, 422	"	alcohol	....	8, 271	
"	Disulphide of, with Cupric				"	Selenides	....	5, 432	
"	Oxyxanthate	....	....	8, 464	"	Seleniocyanide	....	8, 124	
"	Fluorides	....	....	5, 442	"	Silicide	....	5, 464	
"	with fluxes.	....	....	5, 461	"	Sulphides	....	5, 422	
"	grey	....	....	5, 492	"	Sulphomolybdate	....	5, 467	
"	history of	....	....	5, 397	"	Sulphotellurite	....	5, 477	
"	Hydride?	....	....	5, 413	"	Sulphotungstate	....	5, 466	
"	Iodides....	....	....	5, 433	"	Telluride	....	5, 477	
"	Mellonide	....	....	9, 394	"	Thiocyanide	....	8, 115	
"	memoirs, &c., relating to			5, 397	"	two-thirds Cyanide	....	8, 1	
"	Mercaptide	....	....	8, 345	"	and Aluminum, fluoride			
"	Nitride	....	....	5, 444	"	of	....	....	5, 464
"	Nitroprusside	....	....	8, 134	"	and Ammonium, dichlo-			
"	Osmide	....	....	6, 422	"	ride of	....	....	5, 453
"	Oxides....	....	....	5, 402	"	and Ammonium, ful-			
"	Pentasulphide....	....	....	5, 422	"	minate of	....	....	9, 300
"	Peroxide?	....	....	5, 413	"	and Ammonium, proto-			
"	Phosphide	....	....	5, 415	"	chloride of	....	....	5, 454
"	plates, electrotype copies				"	and Ammonium, styph-			
"	of engraved	....	....	1, 506	"	nate of	....	....	11, 235
"	Platinocyanide....	8, 55; 10, 509			"	and Barium, alloy of?			5, 462
"	" compound				"	" salicylate of	12, 254		
"	of with ammonia	....	8, 56		"	" sulphide of	5, 463		
"	Platino-platinidecyanide		8, 56		"	" dichloride			
"	precipitation of, by hy-				"	of	....	5, 463	
"	pophosphorous acid	....	5, 409		"	" sulphocam-			
"	precipitation of, by iron				"	phorate	13, 380		
"			5, 399, 49		"	and Bismuth, alloy of....	5, 477		
"	precipitation of, by				"	" sulphide of	5, 477		
"	phosphorus	....	5, 408		"	and Cadmium, alloy of	5, 481		
"	precipitation of, by				"	and Calcium, sulphide of	5, 463		
"	phosphuretted hydro-				"	and Copper-slag, vana-			
"	gen	....	5, 410		"	dium in	....	4, 81	
"	precipitation of, by				"	and Gold, alloy of	....	6, 246	
"	reducing agents	....	5, 406		"	" cyanide of?	8, 42		
"	precipitation of, by				"	Gold, and Silver, alloy of	6, 251		
"	zinc, tin, and other				"	" Zinc, alloy of	6, 246		
"	metals	....	5, 409		"	and Iridium, alloy of	....	6, 392	
"	preparation of....	....	5, 398		"	and Iron, alloy of	....	5, 489	
"	properties of	....	5, 400		"	" carbide of	....	5, 489	
"	Protobromide	....	5, 436		"	" sulphantimo-			
"	Protochloride	....	5, 438		"	niate of	....	5, 492	
"	Protochloride, its use				"	" sulphide of	....	5, 489	
"	for steeping wood	....	7, 113		"	" sulphostannate			
"	Protocyanide	....	8, 3		"	of	....	5, 496	
"	Protoxide	....	5, 406		"	Iron and Zinc, alloy of	5, 496		
"	Protoselenide	....	5, 432		"	and Lead, alloys of	....	5, 484	
"	Protosulphide	....	5, 422		"	" antimonide of	5, 487		
"	purple....	....	5, 489		"	" selenide of	....	5, 485	
"	reactions of	....	5, 405, 408		"	" -sulphide of	....	5, 485	
"	reduced, effect of in in-				"	Lead, and Antimony,			
"	ducing the combination				"	sulphide of	....	5, 487	



Copper	Lead and Bismuth, sulphide of	....	5, 488	Copper-nickel	....	5, 389
„	Lead, Tin, and Zinc, alloy of	....	5, 488	„	„ preparation of nickel from	.... 5, 355
„	and Magnesium, sulphide of	....	5, 463	„	-ore, azure or blue	.... 5, 415
„	and Manganese, alloy of	....	5, 468	„	„ red	.... 5, 403
„	and Mercury, chloride of	6, 131		„	-ores, occurrence of arsenic in	.... 4, 249
„	and Molybdenum, alloy of	....	5, 467	„	-pyrites	.... 5, 491
„	and Nickel, alloy of	....	5, 497	Copulated Acids and Salts	....	7, 221
„	„ cyanide of	8, 11		„	or Conjugated compounds	.... 7, 213
„	Nickel, and Zinc, alloy	5, 497		Coquimbite	....	5, 245
„	and Nitrogen, boride of?	5, 448		Cordierite	....	3, 434
„	and Palladium, alloy of	6, 357		Coriamyrtin	....	17, 368; 18, 149
„	and Platinum, alloy of	6, 337		Coriander oil	....	14, 336
„	Platinum-deposits on	6, 275		Cork, petrified	....	3, 407
„	Platinum and Zinc, alloy	6, 638		„	-resin	.... 13, 204
„	and Potassium, alloy of	5, 456		„	-wax	.... 18, 159
„	„ antimonide of	....	5, 476	Corn Fusel-oil	....	11, 9
„	„ dichloride of	....	5, 460	„	-cockle seeds, preparation of saponin from	.... 16, 86
„	„ diiodide of	5, 460		Corneous Lead-ore	....	5, 148
„	„ ferrocyanide of	8, 10		Cornin, or Cornic Acid	....	18, 221
„	„ fluoride of	5, 461		<i>Cornus florida</i> , resin from	....	18, 222
„	„ fulminate of	9, 300		„	<i>mascula</i> , resin of the bark of	.... 17, 447
„	„ sulphide of	5, 458		<i>Corpora fixa</i>	....	1, 257
„	Potassium, and Mercury, chloride of	....	6, 131	„	<i>fusibilia</i>	.... 1, 253
„	and Potassium, protochloride of	5, 460		„	<i>refractaria</i>	.... 1, 253
„	„ salicylate of	12, 245		„	<i>volatilia</i>	.... 1, 257
„	„ styphnate of	11, 235		Corpse-fat	....	16, 390
„	and Rhodium, alloy of	6, 368		Corpses, preservation of	....	7, 117
„	and Silver, alloy of	6, 197		<i>Corpus luteum</i> of the Cow, preparation of hæmolutein from	....	18, 18
„	„ selenide of	6, 197		„	<i>mercurio aptum</i>	.... 8, 340
„	„ sulphide of	6, 197		Corpuscular theory	....	1, 154
„	and Sodium, dichloride of	....	5, 462	Corrosive sublimate	....	6, 53
„	and Silver, compounds of orcein with	12, 362		„	use of, for steeping wood	.... 7, 113
„	and Strychnine, sulphate of	17, 496		Cortepinitannic acid	....	15, 489
„	and Tin, alloys of	5, 481		„	wax obtained in the preparation of	18, 16
„	and Titanium, hydrated fluoride of	....	5, 466	<i>Cortex Esenbeckiæ</i> , bitter substances obtained from	....	18, 225
„	and Tungsten, alloy of	5, 466		Corundum	....	3, 305
„	and Zinc, alloys of	....	5, 477	Corydaline	....	17, 607
Copperas	....	5, 237		<i>Corylus Avellana</i> , oil from the shelled seeds of	....	17, 97
Copper-bismuth-glance	....	5, 477		Cotarnamic acid	....	16, 134
„	-bloom	....	5, 405	Cotarnic acid	....	16, 134
„	-glance	5, 420; 5, 422		Cotarnine	....	16, 130
„	„ argentiferous	6, 197		„	hydrated	.... 16, 132
„	„ prismatoidal	5, 488		„	salts	.... 16, 132
Coppering by galvanic precipitation	....	1, 501		Cotton, action of chlorine and hypochlorites on	....	16, 134
Copper-mica	....	5, 399; 5, 471				

Cotton, action of strong nitric acid on ....	15, 135	<i>Crocus Martis, adstringens</i> ....	5, 195
„ action of sulphuric acid on ....	15, 136	„ <i>aperitivus</i> ....	5, 196
„ mercerised ....	15, 141	„ <i>Zwelferi</i> ....	5, 195
„ use of mordants in the dyeing of ....	15, 141	<i>Crocus metallorum</i> ....	4, 359
„ -seed, blue ....	16, 459	Crocydolite ....	5, 281
„ -seed oil ....	17, 94	Cronstedtite ....	5, 386
Coumarin ....	13, 321	Cross-stone ....	3, 446
<i>Couronne des tasses</i> ....	1, 425	Croton oil ....	17, 95
Cooling in vacuo ....	1, 214	Crotonol ....	13, 377
Cow-dung, putrefaction of ....	7, 105	Crown glass ....	3, 380
Cow-tree, resins from the milk of the ....	17, 351	Crude or empirical formulæ of organic compounds ....	7, 8
„ -tree, wax from the milk of ....	18, 160	Crustacea, phosphorescence of ....	1, 182
Crabs, colouring matters of ....	18, 420	Cryolite ....	3, 326
Cracks in glass, diffusion of gases through ....	1, 23	Cryophorus ....	1, 273
Cratægin ....	18, 222	Cryptidine ....	14, 518
Cratinine ....	10, 255	Cryptolite ....	3, 266
„ base obtained from ....	11, 525	Cryptopine ....	18, 193
„ with Chloride of Zinc ....	10, 259	Crystal glass ....	3, 380
„ Hydrochlorate ....	10, 258	Crystallin ....	18, 330
„ Sulphate ....	10, 258	„ syn. with Aniline ....	11, 426
Craw-fish, occurrence of gum in ....	15, 196	Crystalline and amorphous states, substances existing in both ....	1, 104
Cream of Lime....	3, 183	„ compound formed in sulphuric acid chambers ....	2, 451
„ Tartar ....	10, 276	„ form of organic compounds, retention of, when hydrogen is replaced by chlorine ....	7, 46
„ Tartar, compound of, with Tartar-emetic....	10, 305	„ forms of compounds ....	1, 87
Creatine ....	10, 249	„ polarity of bismuth and other bodies....	1, 517
„ Alkali produced by oxidation of ....	9, 378	Crystallisable substances, method of purifying ....	1, 14
„ Hydrate ....	10, 254	Crystallisation ....	1, 8—15
„ Hydrochlorate ....	10, 254	„ accompanied by heat ....	1, 9, 15
„ Nitrate ....	10, 254	„ accompanied by light....	1, 15
„ preparation of cratinine from ....	10, 287	„ effected by access of air ....	1, 8
„ Sulphate ....	10, 254	„ effected by affinity of another body for the solvent ...	1, 12
Creatinine syn. with Cratinine	10, 255	„ effected by agitation ....	1, 9
<i>Cremor tartari</i> ....	10, 276	„ effected by change of temperature ....	1, 8
<i>Cremor tartari solubilis</i>	10, 278, 283	„ effected by chemical combination ....	1, 8, 12
Crenic acid ....	15, 158 ; 17, 466	„ effected by introduction of a solid body ....	1, 9
„ (Mulder's) ....	17, 473	„ effected by solution ....	1, 8
Creosote ....	11, 139		
„ aqueous ....	11, 150		
„ from wood ....	15, 161		
Crepin ....	18, 222		
Cress oil ....	10, 56		
„ -seed oil ....	16, 315		
Cresyl, hydrate ....	12, 229		
Cresylic alcohol ....	12, 229		
Crocetin ....	15, 343 ; 16, 507		
Crocin....	15, 343		
Crocoisite ....	5, 170		
Croconates, metallic ....	10, 390—395		
Croconic acid ....	10, 388		
<i>Crocus antimonii</i> ..	4, 359		

Crystallisation effected by sublimation ....	1, 8	<i>Cucurbita Pepo</i> , oil from the seeds of ....	16, 315
„ influence of adhesion on ....	1, 13	Cudbear, preparation of ....	12, 361
„ influence of foreign bodies on ....	1, 17	Culilawan oil ....	14, 364
„ influence of a vacuum on ....	1, 10	Cumanilide ....	14, 177
„ instantaneous ....	1, 9	Cumaramine ....	13, 337
„ luminous appearances accompanying ....	1, 206	Cumaric acid ....	13, 317
„ phenomena observed in ....	1, 12	Cumarin ....	13, 321
„ supposed influence of magnetism on ....	1, 514	Cumene ....	13, 338
„ theory of spherical atoms in ....	1, 147	Cumeugenyl ....	14, 213
„ water of ....	1, 64; 2, 63	Cumidine ....	13, 348
Crystallised bodies, conduction of heat in ....	1, 222	Cuminamic acid, <i>see</i> Amidocuminic acid.	
„ glass ....	3, 384	Cuminamide ....	14, 173
Crystallographical nomenclature	1, 17	Cuminate, Acetic ....	14, 156
Crystallography, systems of ....	1, 15	„ Benzoic ....	14, 157
Crystals ....	1, 8	„ of Ethyl ....	14, 155
„ axes of ....	1, 15	„ Eugenyl ....	14, 213
„ chemical atoms of ....	1, 147	„ Methyl-salicyl ....	14, 159
„ cleavage-planes of ....	1, 18, 147	„ Phenyl ....	14, 157
„ decrepitation of ....	1, 14	Cuminates, metallic ....	14, 150
„ dimorphous ....	1, 18, 98	Cuminic acid ....	14, 148
„ electricity of ....	1, 319	„ Alcohol ....	14, 143
„ expansion of, by heat ....	1, 233	„ Aldehyde ....	14, 144
„ external forms of ....	1, 15	„ Anhydride ....	14, 159
„ figures of .... Plates I and II		„ Cuminate ....	14, 159
„ internal structure of ....	1, 18	„ Ether ....	14, 155
„ isomorphous ....	1, 18, 87	Cumino-eugenyl Anhydride ....	14, 213
„ modifications of the forms of ....	1, 12	Cuminol ....	14, 144
„ nuclei of ....	1, 19	„ compounds of, with Alkaline Bisulphites ....	14, 147
„ peculiarities in formation of ....	1, 12	„ -potassium ....	14, 147
„ primary and secondary forms of ....	1, 19	Cuminuric acid ....	14, 160
„ texture of ....	1, 18	Cumoglycol, Acetate ....	14, 153
„ trimorphous ....	18, 100	„ Benzoate ....	14, 154
Cuba wax ....	18, 160	Cumol ....	13, 338
Cube-ore ....	5, 306	Cumonnitrile ....	14, 180
Cubebene ....	16, 270	Cumosalicyl ....	14, 158
Cubebin ....	16, 273	Cumyl ....	14, 154
Cubebs, camphor of ....	16, 271	„ Chloride ....	14, 165
„ hydrated oil of ....	16, 271	„ Hydride ....	14, 144
„ oil of ....	16, 272	„ Cœnanthylate ....	14, 159
„ resins of ....	17, 447	Cumylamine ....	19, 508
Cubic Alum ....	3, 323	Cumyl-benzoyl-sulphophenylamide ....	14, 179
„ Nitre ....	4, 117	Cumylene, Acetate ....	14, 153
<i>Cucumis Prophetarum</i> , preparation of prophetin from ....	17, 365	„ Benzoate ....	14, 154
		Cumyl-cœnanthylal ....	14, 159
		Cumyl-phenyl ....	14, 157
		Cumyl-piperide ....	15, 18
		Cumyl-salicylamide ....	14, 179
		„ -sulphophenylamide ....	14, 177
		„ -sulphophenyl-argentamide ....	14, 178
		„ -sulphophenyl-argent-hydrobiamide ....	14, 178
		Cuoxam ....	15, 142
		Cup-apparatus (galvanic) ....	1, 425
		Cupellation of argentiferous lead ....	6, 133



Cuprammonia solution, preparation of	....	....	....	15, 142	use of, for steeping				
Cuprammonium, Isatide of	....	....	....	13, 53	wood	....	....	....	7, 113
„ salts, solubility of cellulose in	....	....	....	15, 142	Cupric Chlorobenzoate	....	....	....	12, 114
Cupranilium, Sulphate of	....	....	....	11, 260	„ Chloroplatinate	....	....	....	6, 337
Cupric Acetates	....	....	....	8, 323-326	„ Chromate	....	....	....	5, 467
„ Acetate with Mercuric Chloride	....	....	....	8, 332	„ Chrysammate	....	....	....	12, 6
„ Aceto-arseniate	....	....	....	8, 329	„ Cinnamate	....	....	....	13, 277
„ Acid ?	....	....	....	5, 413	„ Citrate	....	....	....	11, 459
„ Aconitate	....	....	....	11, 406	„ Comenate	....	....	....	11, 388
„ Albuminate	....	....	....	18, 306	„ Convolvulinolate	....	....	....	16, 153
„ Aldehyde	....	....	....	14, 489	„ Crenate	....	....	....	17, 468
„ Alloxanate	....	....	....	10, 168	„ Croconate	....	....	....	10, 394
„ Althionate	....	....	....	8, 432	„ Cyanide....	....	....	....	8, 3
„ Albuminate	....	....	....	5, 464	„ Cyanurate	....	....	....	9, 455
„ Anisate	....	....	....	13, 585	„ Ethionate	....	....	....	8, 434
„ Antimoniate	....	....	....	5, 475	„ Ethylosulphite	....	....	....	8, 410
„ Antimonite	....	....	....	5, 475	„ Ethyltrithionate	....	....	....	12, 515
„ Ammonio-sulphate	....	....	....	5, 448	„ Eugenate	....	....	....	14, 206
„ Amylophosphate	....	....	....	11, 51	„ Euxanthate	....	....	....	17, 535
„ Amylosulphate	....	....	....	11, 60	„ Ferridcyanide	....	....	....	8, 8
„ Amylosulphite	....	....	....	11, 53	„ Ferrocyanide	....	....	....	8, 8
„ Apocrenate	....	....	....	17, 470	„ Formiate	....	....	....	7, 281
„ Arabate	....	....	....	15, 204	„ Fulminate	....	....	....	9, 300
„ Arachidate	....	....	....	17, 372	„ Fumarate	....	....	....	10, 30
„ Arseniate	....	....	....	5, 471	„ Gaedinate	....	....	....	16, 320
„ Arsenite....	....	....	....	5, 470	„ Gallate	....	....	....	12, 410
„ Aspartate	....	....	....	10, 238	„ Gambodate	....	....	....	17, 419
„ Azelaate....	....	....	....	17, 81	„ Hippurate	....	....	....	12, 80
„ Azophosphate	....	....	....	5, 456	„ Hydrobromate	....	....	....	5, 436
„ Benzoate	....	....	....	12, 43	„ Hydrofluante	....	....	....	5, 443
„ Benzoglycolate	....	....	....	12, 68	„ Hydrothiosulphocyanide	....	....	....	8, 101
„ Bibromisate	....	....	....	13, 71	„ Hypochlorite	....	....	....	5, 442
„ Bichlorisatate	....	....	....	13, 81	„ Hypophosphite	....	....	....	5, 417
„ Biethylophosphate	....	....	....	8, 402	„ Hyposulphate	....	....	....	5, 424
„ Bimethylophosphate	....	....	....	12, 483	„ Hyposulphophosphite	....	....	....	5, 431
„ Binitroethylate	....	....	....	12, 559	„ Inosate	....	....	....	11, 120
„ Bisulphometholate	....	....	....	12, 485	„ Insolinate	....	....	....	13, 320
„ Borate	....	....	....	5, 415	„ Iodate	....	....	....	5, 434
„ Bromacetate	....	....	....	12, 533	„ Isethionate	....	....	....	8, 431
„ Bromate	....	....	....	5, 437	„ Isobiglycolethylenate	....	....	....	15, 237
„ Bromide	....	....	....	5, 436	„ Isotartrate	....	....	....	10, 333
„ Butyrate	....	....	....	10, 87	„ Itaconate	....	....	....	10, 427
„ Cacodylate	....	....	....	9, 330	„ Jalapinolate	....	....	....	16, 403
„ Caffetannate	....	....	....	15, 509	„ Kinate	....	....	....	16, 232
„ Camphorate	....	....	....	14, 461	„ Kinovate	....	....	....	18, 25
„ Caprate	....	....	....	14, 488	„ Lactate....	....	....	....	11, 493
„ Carbonate	....	....	....	5, 414	„ Lecanorate	....	....	....	12, 379
„ Carbonate with Ammonia	....	....	....	5, 448	„ Leucate....	....	....	....	15, 62
„ Chelidonate	....	....	....	12, 420	„ Malate	....	....	....	10, 224
„ Chlorate....	....	....	....	5, 442	„ Maleate	....	....	....	8, 159
„ Chloride....	....	....	....	5, 438	„ Malate with Sulphate of Ammonia	....	....	....	10, 225
„ Chloride, compound of, with Urea	....	....	....	13, 404	„ Mandelate	....	....	....	12, 59
„ Chloride and Sulphate,					„ Mannitate	....	....	....	15, 383
					„ Meconates	....	....	....	12, 430
					„ Mellitate	....	....	....	10, 10
					„ Mesaconate	....	....	....	10, 432
					„ Metaphosphate	....	....	....	5, 420
					„ Methylobithionate	....	....	....	12, 489

Cupric Molybdate ....	5, 467	Cupric Pimelate ....	12, 465
„ Mono-hydrochlorate ....	5, 439	„ Piperate ....	15, 10
„ Mucate ....	11, 508	„ Pipitzahoate ....	16, 265
„ Myristate ....	16, 213	„ Propionate ....	9, 407; 10, 555
„ Nitrate ....	5, 446	„ Pyrogallate ....	11, 402
„ Nitrite ....	5, 446	„ Pyromeconate ....	10, 443
„ Nitrobenzoate ....	12, 127	„ Pyromucate ....	10, 385
„ Nitrococussate ....	13, 27	„ Pyrophosphate ....	5, 419
„ Nitrofrangulate....	16, 79	„ Pyrotartrate ....	11, 97
„ Nitrohippurate ....	12, 131	„ Quadrosilicate ....	5, 465
„ Nitrosalicylate ....	12, 310	„ Racemate ....	10, 359
„ Nitrotoluylate ....	13, 23	„ Rhodizonate ....	10, 403
„ Œnanthate ....	12, 456	„ Ricinelaidate ....	17, 137
„ Œnanthylate ....	12, 453	„ Saccharates ....	11, 522
„ Oleate ....	17, 73	„ Salicylamate ....	12, 322
„ Oxalate ....	9, 164	„ Salicylate ....	12, 253
„ „ with Ammonia....	9, 165	„ Salicylite ....	12, 243
„ Oxide ....	5, 406	„ Salts, general characters	
„ with Ammonia ....	5, 447	of ....	5, 408
„ with Asparagine ....	10, 247	„ Sarcolactates ....	11, 500
„ with Baryta? ....	5, 463	„ Sebate ....	14, 498
„ compounds of, with		„ Seleniate ....	5, 433
cane-sugar ....	15, 290	„ Selenide ....	5, 432
„ with Cuprous Chlo-		„ Selenite....	5, 433
ride ....	5, 438	„ Silicates ....	5, 464
„ Hydrated ....	5, 407	„ Silicofluoride ....	5, 465
„ with Kinovin ....	18, 29	„ Stannate ....	5, 484
„ with Lead-oxide ....	5, 485	„ Stearate ....	17, 112
„ and Lead-oxide, hy-		„ Styphnate ....	11, 234
posulphite of? ....	5, 485	„ Suberate ....	13, 211
„ with Leucine ....	11, 432	„ Succinate ....	10, 128
„ with Lime ....	5, 463	„ Sucrate, colloidal	15, 539
„ with Peroxide of		„ Sulphanilate ....	11, 298
Manganese ....	5, 468	„ Sulphantimoniate	5, 476
„ with Soda ....	5, 461	„ Sulpharseniate ....	5, 474
„ solution of, in vola-		„ Sulpharsenite ....	5, 474
tile oils ....	7, 168	„ Sulphate ....	5, 425
„ use of, in ultimate		„ „ with Ani-	
analysis of organic		line ....	11, 260
compounds ....	7, 86	„ Sulphate, with Fluoride	
„ Oxybromide ....	5, 436	of Calcium ....	5, 463
„ Oxychloride ....	5, 440	„ Sulphite ....	5, 424
„ Oxyfluoride, hydrated	5, 443	„ Sulphobenzolate ....	11, 156
„ Oxyxanthate, and its com-		„ Sulphocamphorate	13, 380
pound with disulphide		„ Sulphocarbonate	5, 431
of copper ....	8, 464	„ Sulphocinnamate	13, 280
„ Palmitate ....	16, 363	„ Sulphocyanide ....	8, 92
„ Pectate ....	15, 408	„ „ with Am-	
„ Pelargonate ....	13, 371	monia ....	8, 94
„ Perchlorate ....	5, 442	„ Sulphocymenate	14, 191
„ Periodate ....	5, 434	„ Sulphophosphate	5, 432
„ Permanganate ....	5, 468	„ Sulphosalicylate	12, 280
„ Persulphomolybdate	4, 467	„ Sulphosomethylate	7, 301
„ Phloretate ....	13, 312	„ Sulphovinate ....	8, 427
„ Phosphate ....	5, 418	„ Sylvate ....	17, 322
„ Phosphite ....	5, 417	„ Tannate....	15, 470
„ Phytetoleate ....	16, 319	„ Tartrate ....	10, 320
„ Picramate ....	11, 245	„ Tartrovinatate	10, 342
„ Picrate ....	11, 226	„ Tellurate ....	5, 477

Cupric Tellurite ....	5, 477	Cuproso-cupric Cyanides, Ammoniacal	10, 505; 12, 497
„ Terchlorosulphosomethylate ....	7, 353	„ -cupric Hydrochlorate....	5, 438
„ Thionurate ....	10, 185	„ -cupric Sulphocyanide....	8, 92
„ Toluylate ....	13, 9	Cuprosoferrocyanide of Potassium	13, 409
„ Tungstate ....	5, 466	Cuproso-mercurous Hyposulphite	6, 131
„ Usnate ....	17, 51	„ -potassic Chloride ....	5, 460
„ Valerate ....	11, 36	„ -potassic Hyposulphite....	5, 458
„ Vanadate ....	4, 81; 5, 467	„ -potassic Iodide ....	5, 460
„ Zirconate ....	5, 464	„ -potassic Sulphite ....	5, 459
Cuprico-ammonic Acetate ....	8, 326	„ -sodic Chloride....	5, 462
„ Chloride ....	5, 454	„ -sodic Hyposulphite ....	5, 461
„ Chromate ....	5, 468	Cupro-sulphate of Ammonia ....	5, 449
„ Sulphates ....	5, 450	Cuprous Acetate ....	8, 323
Cuprico-calcic Acetate ....	8, 328	„ Bromide ....	5, 435
„ -cobaltous Sulphate ....	5, 496	„ Chloride ....	5, 438
„ -ferrous Sulphate ....	5, 492	„ Chloride with Cupric Oxide ....	5, 438
„ -magnesian Sulphate ....	5, 463	„ Chloride with Xanthamide....	9, 277—282
„ -magnesian-ammonic Sulphate ....	5, 463	„ Cyanide ....	8, 1
„ -niccolic Sulphate ....	5, 497	„ Ferridcyanide ....	8, 8
„ -niccolo-potassic Sulphate ....	5, 497	„ Ferrocyanide ....	8, 8
„ -plumbic Chromate ....	5, 486	„ Fluoride ....	5, 442
„ -potassic Carbonate ....	5, 458	„ Hydrobromate ....	5, 436
„ -potassic Chloride ....	5, 460	„ Hydrochlorate, acid ...	5, 439
„ -potassic Seleniate ....	5, 460	„ Hyposulphite ....	5, 423
„ -potassic Sulphate ....	5, 439	„ Hyposulphophosphite....	5, 431
„ -sodic Carbonate ....	5, 461	„ Iodide....	5, 433
„ -sodic Sulphate....	5, 462	„ Iodide with Xanthamide....	9, 276—277
„ -zincic Carbonate ....	5, 480	„ Manganese	4, 204; 5, 468
„ -zincic-potassic Sulphate	5, 481	„ Naphthionate ....	14, 114
Cupro-acetate of Picoline ....	11, 271	„ Oxalate ....	9, 164
„ -bromate of Ammonia ....	5, 452	„ Oxide....	5, 403
Cuprocyanide of Ammonium ....	8, 3	„ Oxide with Ammonia ....	5, 447
„ Barium ....	8, 7	„ Oxide with Antimonic Oxide ....	5, 474
„ Bismuth ....	8, 7	„ Oxide with Glass Fluxes	5, 467
„ Cadmium ....	8, 7	„ Oxide hydrated ....	5, 405
„ Copper ....	8, 10	„ Oxide with Lead-oxide	5, 484
„ Iron ....	8, 7	„ Oxide with Potash ....	10, 456
„ Lead ....	8, 7	„ Racemate ....	10, 359
„ Manganese ....	8, 7	„ Salts, formation and general characters of	5, 405
„ Nickel ....	8, 11	„ Selenide ....	5, 432
„ Potassium ....	8, 4	„ Selenite ....	5, 432
„ Silver ....	8, 33	„ Silicofluoride ....	5, 465
„ Sodium ....	8, 7	„ Stannate ....	5, 483
„ Tin ....	8, 7	„ Sulphantimonite ....	5, 476
„ Uranium ....	8, 7	„ Sulphite ....	5, 423
„ Zinc ....	8, 7	„ Sulphocacodylate ....	9, 338
Cupro-fumate of Ammonia ....	10, 30	„ Sulphocyanide ....	8, 90
Cupro-hyposulphate of Ammonia ....	5, 448	„ Sulphocyanide with Ammonia ....	8, 93
„ -iodate of Ammonia ....	5, 452	„ Sulphocyanide with Xanthamide ....	9, 282
Cupro-mellitate of Ammonia ....	10, 11	„ Sulphophosphite ....	5, 431
Cupro-nitrate of Ammonia ....	5, 455	„ Viridate ....	15, 511
Cuproso-ammonic Chloride ....	5, 453		
„ -barytic Chloride ....	5, 463		
„ -cupric Chloride ....	5, 438		
„ -cupric Cyanide ....	8, 1		



Cuprous Xanthate	....	....	8, 459	of, with Cyanide of			
<i>Cuprum</i>	....	....	5, 397	Nickel	....	....	7, 499
Curarine	....	....	17, 592	Cyanide of Benzoyl	....	12, 52; 12,	118
Curcuma, oil	....	....	14, 367	„ Butyl	....	....	11, 121
„ Zerumbet, oil of	....	....	14, 367	„ Cacodyl	....	....	9, 349
Curcumin	....	....	16, 518	„ Cadmium	....	7, 426; 9,	507
Curic acid	....	....	18, 19	„ Cadmium, compounds			
Currants, colouring matter of	....	....	16, 529	of, with Cyanide of			
Curves, magnetic	....	....	1, 168	Nickel	....	....	7, 499
Cusparin	....	....	18, 222	„ of Cadmium and Lead	....	7,	428
Cutin	....	....	15, 145	„ of Cadmium and Potas-			
Cyamelide ?	....	....	9, 462	sium	....	....	7, 426
Cyameluric acid	....	....	9, 382	„ of Calcium	....	7, 417; 12,	426
Cyanamide	....	....	8, 145	„ of Calcium, compounds			
Cyanate of Allyl	....	....	13, 544	of, with Cyanide of			
Cyanate of Ammonia	....	....	8, 65	Nickel	....	....	7, 499
Cyanate of Ammonia, prepara-				„ of Cerium	....	....	7, 417
tion of Urea from	....	....	7, 365	„ of Cetyl	....	....	16, 374
„ Aniline, abnormal	....	....	11, 303	„ Chromic	....	....	7, 419
„ Baryta	....	....	8, 67	„ Chromous	....	....	7, 419
„ Cupric	....	....	8, 68	„ Cinnamyl	....	....	13, 299
„ of Ethyl	....	....	8, 486	„ Cupric	....	....	8, 3
„ Ferrous	....	....	8, 68	„ Cuproso-cupric	....	....	8, 1
„ of Lead	....	....	8, 68	„ Cuprous	....	....	8, 1
„ Lime	....	....	8, 68	„ of Ethyl	....	....	8, 486
„ Mercurous	....	....	8, 68	„ of Ethyl, compound of,			
„ of Methyl	....	....	8, 488	with Chloride of Car-			
„ Naphthyl	....	....	14, 118	bonyl	....	....	13, 457
„ Potash	....	....	8, 65	„ of Ethyl, compounds of,			
„ Silver	....	....	8, 68	with metallic Chlo-			
„ Soda	....	....	8, 67	rides	....	....	13, 457
Cyanates, metallic	....	....	8, 64—70	„ of Ethyl and Silver	....	....	13, 458
Cyanethine	....	....	13, 236	„ Ferric	....	....	7, 448
Cyanetholine	....	....	13, 566	„ Ferrous	....	....	7, 432
Cyanethylamide	....	....	9, 293	„ of Gold and Calcium	....	....	8, 42
Cyanic acid	....	....	8, 61	„ of Gold and Copper ?	....	....	8, 42
„ aqueous	....	....	8, 63	„ of Iron, compounds of			7, 429
„ with Bitter Almond				„ of Iron, compounds of,			
oil	....	....	12, 28	with Cyanide of Nickel			7, 499
„ Hydrochlorate	....	....	8, 63	„ of Lead	....	....	7, 427
„ solubility of, in al-				„ of Lead, compounds of,			
cohol	....	....	8, 273	with Cyanide of Nickel			7, 499
Cyanic Amides	....	....	9, 293	„ of Magnesium	....	7, 417; 12,	495
„ Ether	....	....	8, 487	„ Manganic	....	....	7, 421
„ Ether, hydrochlorate of	....	....	13, 563	„ Manganoso-manganic	....	....	7, 421
Cyanide of Ammonium	....	....	7, 410	„ Manganous	....	....	7, 421
„ Ammonium, forma-				„ of Mercury	....	....	8, 11
tion of by action of				„ of Mercury, compounds			
ammonia on car-				of	....	....	13, 409
bon, carbonic oxide,				„ of Mercury with Ace-			
or organic substan-				tate of Mercury	....	....	8, 332
ces at a red heat	....	....	7, 382	„ of Mercury with Ace-			
„ Amyl	....	....	11, 67	tate of Soda	....	....	8, 333
„ Amyl, preparation of				„ of Mercury with Am-			
Caproic acid from	....	....	11, 415	monia	....	....	8, 17
„ Auric ?	....	....	8, 36	„ of Mercury with Bro-			
„ Aurous	....	....	8, 34	mide of Barium	....	....	8, 22
„ of Barium	....	7, 417; 12,	495	„ of Mercury with Bro-			
„ Barium, compounds				mide of Calcium	....	....	8, 23

Cyanide of Mercury with Bromide of Potassium ....	8, 20	Cyanide of Mercury with Mercuric Nitrate....	8, 17
„ of Mercury with Bromide of Sodium* ....	8, 21	„ of Mercury with Nitrate of Silver ....	8, 33
„ of Mercury with Bromide of Strontium ....	8, 22	„ of Mercury and Nitro-harmine ....	16, 111
„ of Mercury with Chloride of Ammonium ....	8, 17	„ of Mercury and Potassium ....	8, 18
„ of Mercury with Chloride of Barium ....	8, 22	„ of Mercury with Sulphocyanide of Barium	8, 96
„ of Mercury with Chloride of Calcium ....	8, 23	„ of Mercury with Sulphocyanide of Calcium	8, 96
„ of Mercury with Chloride of Cobalt ....	8, 26	„ of Mercury with Sulphocyanide of Magnesium....	8, 96
„ of Mercury with Chloride of Magnesium ....	8, 23	„ of Mercury with Sulphocyanide of Potassium....	8, 96
„ of Mercury with Chloride of Manganese ....	8, 24	„ of Mercury with Strychnine ....	17, 500
„ of Mercury with Chloride of Nickel ....	8, 26	„ of Mercury and Zinc?	8, 24
„ of Mercury with Chloride of Potassium ....	8, 20	„ of Methyl ....	8, 60; 9, 294
„ of Mercury with Chloride of Sodium ....	8, 21	„ of Methyl, compounds of, with Metallic Chlorides....	13, 412
„ of Mercury with Chloride of Strontium ....	8, 22	„ of Methyl and Mercury	13, 412
„ of Mercury with Chloride of Zinc ....	8, 24	„ of Nickel ....	7, 498
„ of Mercury with Chromate of Potash ....	8, 23	„ of Nickel and Ammonium....	7, 498
„ of Mercury with Ferrocyanide of Potassium	8, 25	„ of Nickel and Cobalt....	7, 500
„ of Mercury with Formiate of Ammonia ....	8, 26	„ of Nickel and Copper	8, 11
„ of Mercury with Formiate of Potash ....	8, 26	„ of Nickel, compounds of, with Cyanide of Barium ....	7, 499
„ of Mercury with Hydriodate and Hydrobromate of Cinchonine ....	17, 214	„ of Nickel, compounds of, with Cyanide of Cadmium ....	7, 499
„ of Mercury with Hydrochlorate of Berberine	17, 195	„ of Nickel, compounds of, with Cyanide of Calcium ....	7, 499
„ of Mercury with Hydrochlorate of Ethylamine....	9, 62	„ of Nickel, compounds of, with Cyanide of Iron ....	7, 499
„ of Mercury with Hydrochlorate of Strychnine	17, 500	„ of Nickel, compounds of, with Cyanide of Lead....	7, 499
„ of Mercury with Hypo-sulphite of Potash ....	8, 19	„ of Nickel, compounds of, with Cyanide of Sodium ....	7, 499
„ of Mercury with Iodide of Barium ....	8, 22	„ of Nickel and Potassium ....	7, 498
„ of Mercury with Iodide of Calcium ....	8, 23	„ of Nitrogen? ....	8, 147
„ of Mercury with Iodide of Potassium....	8, 19	„ of Phenyl ....	12, 161
„ of Mercury with Iodide of Sodium ....	8, 21	„ of Phosphorus ....	8, 147
„ of Mercury with Iodide of Strontium....	8, 22	„ Platinous ....	8, 43
„ of Mercury and Lead?	8, 24	„ of Platinum with Hydrocyanate of Quinine	17, 287
		„ of Platosammonium ....	8, 45
		„ of Potassium ....	7, 411

- Cyanide of Potassium, formation  
 of, by heating nitro-  
 genous organic com-  
 pounds with Potas-  
 sium .... 7, 146  
 „ of Silver .... 8, 26  
 „ of Silver, compounds of 13, 410  
 „ of Sodium .... 7, 417  
 „ of Sodium, compounds  
 of, with Cyanide of  
 Nickel .... 7, 499  
 „ of Stibethyl .... 9, 85  
 „ of Stibmethylethylum 13, 502  
 „ of Strontium .... 12, 495  
 „ of Titanium ? .... 7, 418  
 „ of Uranic ? .... 7, 421  
 „ of Vanadium .... 7, 419  
 „ of Yttrium .... 7, 417  
 „ of Zinc .... 7, 422  
 „ of Zinc and Ammonium 7, 423  
 „ of Zinc and Barium .... 7, 425  
 „ of Zinc and Calcium .... 7, 425  
 „ of Zinc and Lead .... 7, 428  
 „ of Zinc and Potassium 7, 424  
 „ of Zinc and Sodium .... 7, 425  
 Cyanides, Ammoniacal Cuproso-  
 cupric .... 8, 3 ; 10, 505 ; 12, 497  
 Cyanides of Cobalt .... 7, 492  
 „ of Copper .... 8, 1  
 Cyanides, Ferrous and Ferric,  
 compounds of, with water ... 7, 434  
 Cyanides of Gold .... 8, 34  
 „ of Iridium .... 8, 60  
 „ of Iron .... 7, 429  
 „ of Iron and Bismuth... 7, 429  
 „ of Iron and Cadmium 7, 490  
 „ of Iron and Chromium 7, 487  
 „ of Iron and Manganese 7, 488  
 „ of Iron and Molybde-  
 num .... 7, 487  
 „ of Iron and Tin .... 7, 490  
 „ of Iron and Uranium 7, 488  
 „ of Iron and Vanadium 7, 487  
 „ of Iron and Zinc .... 7, 489  
 „ metallic .... 7, 404  
 „ metallic, classification  
 of .... 7, 406  
 „ metallic, decomposition  
 of, by hydriodic  
 ethers .... 13, 408  
 „ metallic, double, con-  
 stitution and reac-  
 tions of .... 7, 407  
 „ metallic, electrolysis of 1, 456  
 „ metallic, formation of 13, 386  
 „ metallic, solubility of,  
 in alcohol ... 8, 273  
 „ of Palladium... 8, 59  
 „ Platinum... 8, 43  
 Cyanilide .... 11, 303  
 Cyaniline .... 11, 359  
 Cyanin .... 16, 522  
 Cyanite .... 3, 412  
 Cyanobenzoyl, hydride of .... 12, 212  
 Cyanobibromopierin .... 12, 550  
 Cyanocumidine... 13, 353  
 Cyanodibromopierin .... 12, 551  
 Cyanodiethylamide .... 9, 293  
 Cyanoform ? .... 8, 148  
 Cyanogen .... 7, 379  
 „ action of, on alkalis  
 and alkaline carbo-  
 nates .... 7, 387  
 „ action of, on am-  
 monia in aqueous  
 solution .... 7, 380  
 „ Ammonio-bromide .... 8, 139  
 „ Ammonio-chloride .... 8, 145  
 „ Ammonio-iodide .... 8, 138  
 „ and Antimony, chlo-  
 ride .... 8, 146  
 „ Bi-hydrosulphate .... 8, 118  
 „ Bromide .... 8, 139  
 „ Bromide, solid ? .... 9, 462  
 „ Chlorhydride .... 9, 463  
 „ Chloride, liquid  
 9, 466 ; 14, 565  
 „ Chloride, solid .... 9, 463  
 „ Chloride, volatile .... 8, 140  
 „ and Iron chloride of 8, 147  
 „ compounds, solubility  
 of, in alcohol .... 8, 273  
 „ decomposition of  
 aqueous .... 7, 386  
 „ decomposition of, by  
 chlorine .... 7, 385  
 „ decomposition of, by  
 the electric spark... 7, 385  
 „ formation of 7, 379 ; 13, 407  
 „ formation of, by ig-  
 niting nitrogenous  
 organic compounds  
 with a fixed alkali... 7, 383  
 „ gas, absorption of, by  
 volatile oils .... 7, 168  
 „ Iodide .... 8, 135  
 „ literature and his-  
 tory of .... 7, 378  
 „ maximum tension of,  
 at different temper-  
 atures .... 1, 261  
 „ preparation of .... 7, 384  
 „ reaction of, with iron 7, 388  
 „ Sesqui-hydrosulphate 8, 116  
 „ solid .... 11, 371  
 „ and Titanium, chlo-  
 ride of .... 8, 146  
 Cyanomethylethylamide .... 9, 293



Cyanoplatinate of Cinchonine ....	17, 214	Cyanuric acid ....	9, 449
Cyanotoluidine ....	12, 343	„ ether ....	9, 459
Cyanurate of Ammonia ....	9, 452	Cyanurin ....	13, 36; 18, 407
„ Amyl ....	11, 74	Cyanylic acid ....	9, 461
„ Baryta ....	9, 453	<i>Cycas</i> , preparation of starch from	
„ Bicupric with Am-		the stems of various species	
monia ....	9, 455	of ....	15, 77
„ of Cinchonine ....	17, 216	Cyclamin ....	15, 343; 16, 200
„ Cupric ....	9, 455	Cyclamiretin ....	16, 200
„ of Ethyl ....	9, 459; 13, 562	<i>Cyclicodaphne sebifera</i> , fat of ....	16, 390
„ Lead ....	9, 454	Cymene or Cymol ....	14, 183
„ Lime ....	9, 454	„ (a) ....	14, 186
„ Methyl ....	9, 458	„ preparation of toluylic	
„ Morphine ....	16, 435	acid from ....	13, 8
„ Potash ....	9, 452	Cymidine ....	14, 218
„ Quinine ....	17, 289	Cymyl and Hydrogen, bromide	14, 214
„ Silver ....	9, 456	„ „ chloride	14, 215
„ Silver with Am-		Cymylic alcohol ....	14, 143
monia ....	9, 457	Cynapine ....	18, 193
„ Silver and Lead ....	9, 458	Cynene ....	14, 320
„ Silver and Potas-		<i>Cyperus esculentus</i> , fatty oil	
sium ....	9, 458	from the roots of ....	17, 95
„ Soda ....	9, 453	Cystine ....	9, 438
„ Urea ? ....	9, 458	Cytisine ....	18, 193

## D.

Dadyl, <i>see</i> Camphilene.		Daphnetin ....	17, 174
Daguerreotype ....	1, 178	Daphnin ....	15, 343; 17, 176
„ pictures, electro-		Dark-grey Copper ....	5, 498
type copies of ....	1, 509	Dark-red Silver ....	6, 190
Daguerre's bromide of silver		Datisctin ....	16, 262
paper ....	1, 176	Datiscin ....	15, 343; 16, 263
„ chloride of silver		Datolite ....	3, 392
paper ....	1, 173	<i>Daucus Carota</i> , Carotin in ....	17, 14
Dahlia oil ....	14, 367	Davidsonite ....	3, 427
„ -tubers, preparation of		Davy: his electro-chemical re-	
Inulin from ....	15, 173	searches ....	1, 6, 458, 468-472
Dahlin ....	15, 112	Dead oil ....	11, 135
Dalleiochine ....	17, 272	Deadly nightshade, colouring	
Dalton's law of the absorption		matter of the roots	
of mixed gases by		of ....	17, 1
liquids ....	2, 67	„ nightshade, prepara-	
Dalton's atomic theory	1, 6, 146	tion of atropine from	16, 449
Damaluric acid ....	12, 436	„ nightshade seed, oil	
Dammar-puti ....	17, 335	of ....	16, 314
„ -resin ....	17, 334	Decahexyl Chloride, <i>see</i> Bichlo-	
Dammaryl ....	17, 332	ronaphthalin.	
„ semihydrate of ....	17, 333	„ Perbromide, <i>see</i> Bi-	
Dandelion roots, preparation of		hydrobromate of Bi-	
inulin from ....	15, 114	bromobichloronaph-	
Daniell's constant battery ....	1, 421	thalin.	
„ ether-hygrometer ....	1, 288	„ Perchloride, <i>see</i> Bi-	
Daphnads, resin and acrid prin-		hydrochlorate of	
ciple of the ....	17, 178	Quadrichloronaph-	
<i>Daphne Mezereum</i> , oil of the		thalin.	
seeds of ....	17, 95	Deca-iodide of Tetramethylum	10, 498

- Decapentyl chloride, *see* Terchloronaphthalin.
- Decasulphide of Ethylene ? .... **8**, 355
- Decay .... .... **7**, 91
- Decomposing affinities, table of **1**, 140
- „ cell .... .... **1**, 431
- „ cell of a voltaic battery, development of heat in the .... .... **1**, 496
- „ cells, effect of number of, in the voltaic circuit, on the tension and quantity of the current .... **1**, 480
- Decomposition by affinity **1**, 117 to 133
- „ by adhesion .... **1**, 125
- „ anomalies observed in .... **1**, 116
- „ by catalysis **1**, 114—116
- „ change of temperature resulting from **1**, 133
- „ chemical **1**, 111—141
- „ chemical, development or absorption of heat accompanying .... **1**, 291
- „ circumstances and results of **1**, 135—137
- „ by cohesion **1**, 112—114, 123
- „ conditions of **1**, 111—133
- „ by contact .... **1**, 115
- „ by double affinity **1**, 119
- „ in the dry way **1**, 116
- „ detonation resulting from.... **1**, 134
- „ educts of .... **1**, 111
- „ effected by heat or light, development of electricity by **1**, 336
- „ by the electric current, degree of .... **1**, 434
- „ by the electric current, direct and indirect.... **1**, 434
- „ by the electric current, place of .... .... **1**, 435
- „ by the electric current, theory of .... .... **1**, 432
- Decomposition by electricity .... **1**, 117
- „ explosion resulting from .... **1**, 134
- „ by fluidity and gaseity .... **1**, 115
- „ by heat .... **1**, 137
- „ induced by decomposing activity on another body .... .... **1**, 115
- „ influence of the chemical nature of the electrodes on .... .... **1**, 445
- „ influence of the intensity of the current on .... **1**, 439
- „ influence of the nature of the electrolyte on **1**, 442
- „ influence of the relative volume of the electrolyte on .... **1**, 445
- „ influence of the surface of the electrodes on.... **1**, 446
- „ influence of the temperature and compression of the electrottype on .... .... **1**, 444
- „ by light .... **1**, 117
- „ quantity of the products of, in the voltaic circuit .... .... **1**, 479
- „ precipitation resulting from.... **1**, 135
- „ by predisposing affinity .... **1**, 124
- „ produced by the electric discharge .... **1**, 430
- „ products of .... **1**, 111
- „ by reciprocal affinity.... **1**, 125—133
- „ schemes of **1**, 13; and Plate III
- „ by simple affinity .... .... **1**, 117
- „ spontaneous, of organic compounds .... **7**, 90
- „ by vital force .... **1**, 115
- „ in the wet way **1**, 116
- Decrepitation of Salts .... .... **1**, 13
- Deer-fat .... .... **16**, 390
- Deflagrator, Hare's .... .... **1**, 409

Deformation, Fuchs's theory of .... 1, 103	Dextroglucose combinations of, with Water .... 15, 323
Dekatetrayl Chloride, <i>see</i> Quadri- chloronaphthalin.	„ compounds of, with Baryta .... 15, 327
De la Rive's Hygrometer .... 1, 289	„ compounds of, with Lime .... 15, 328
De la Rue's Battery .... 1, 425	„ compounds of, with Sodium chloride .... 15, 325
Delphinin .... 11, 77	„ decomposition of, by Acetic acid.... 15, 316
Delphinine .... 18, 21	„ decomposition of, by Alkalis and Alkaline earths 15, 318
<i>Delphinium consolida</i> , prepara- tion of aconitic acid from .... 11, 403	„ decomposition of, by Ammonia .... 15, 318
<i>Delphinus globiceps</i> , oil of .... 16, 323	„ decomposition of, by Arsenic acid 15, 316
„ <i>Phocæna</i> , oil of .... 16, 323	„ decomposition of, by basic Nitrate of Bismuth .... 15, 319
De Luc's or Zamboni's pile .... 1, 426	„ decomposition of, by Bromine .... 15, 315
Density, alteration caused in, by combination .... 1, 64	„ decomposition of, by Chlorine .... 15, 316
„ and atomic weight of compounds .... 1, 64—86	„ decomposition of, by combustion in the air .... 15, 315
„ and atomic weight of elements, relations be- tween .... 1, 52—59	„ decomposition of, by Cupric Salts 15, 320
„ and atomic weight, Fil- hol's calculations re- specting .... 1, 79	„ decomposition of, by Ferric Salts 15, 320
„ and elasticity of gases, relation between .... 1, 257	„ decomposition of, by heat .... 15, 315
Deoxidising rays of light .... 1, 180	„ decomposition of, by heating with Bicarbonate of Potash and Io- dine .... 15, 315
Dephlogisticated air .... 2, 20	„ decomposition of, by heating with Lime .... 15, 319
„ Muriatic acid 2, 289	„ decomposition of, by heating with Organic acids .... 15, 317
Desiccation .... 1, 271	„ decomposition of, by heating with Water.... 15, 315
Desmine .... 3, 443	„ decomposition of, by Hydrochloric acid .... 15, 316
<i>Destillatio per descensum</i> .... 6, 2	„ decomposition of, by Indigo .... 15, 321
Detonating gas .... 2, 45	„ decomposition of, by Iodic acid .... 15, 316
„ effect of admix- ture of various gases in retard- ing or prevent- ing the com- bustion of, in contact with platinum, &c. 2, 53	„ decomposition of, by lactous fer- mentation .... 15, 321
Detonating Platinum-deposit .... 8, 378	„ decomposition of,
„ powder .... 3, 70	
Detonation resulting from de- composition .... 1, 134	
Detonations, electricity in .... 1, 341	
Deutoxide of Hydrogen .... 2, 73	
Deweylite .... 3, 396	
Dew-snail, colouring matter in the mantle of .... 18, 419	
<i>Dextrin</i> .... 15, 185	
„ formation of dextroglu- cose from .... 15, 306	
Dextro-camphor .... 14, 339	
Dextroglucose .... 15, 304	
„ alcoholic solution of .... 15, 329	
„ aqueous solution of .... 15, 324	



	by Mercurous Nitrate ....	15, 321	Dextroglucose, formation of, from Glycogen ....	15, 308
Dextroglucose, decomposition of, by Metallic oxides ....	15, 318		„ formation of, from Lichenin....	15, 308
„ decomposition of, by Nitrate of Baryta ....	15, 319		„ formation of, from Maltose ....	15, 309
„ decomposition of, by Nitrate of Cobalt ....	15, 320		„ formation of, from Mannite....	15, 310
„ decomposition of, by Nitrate of Silver ....	15, 321		„ formation of, from Oxalate of Ethyl ....	15, 310
„ decomposition of, by Nitric acid....	15, 316		„ formation of, from Starch ....	15, 306
„ decomposition of, by Oxalic acid....	15, 316		„ formation of, from Tunicin ....	15, 39
„ decomposition of, by oxidation in contact with spongy Platinum	15, 315		„ formation of, by transformation of Carbohydrates, with assumption of water ....	15, 306
„ decomposition of, by Oxide of Lead	15, 320		„ Hydrates of ....	15, 323
„ decomposition of, by Phosphoric acid ....	15, 316		„ Lead-compounds of ....	15, 328
„ decomposition of, by Platinic Chloride ....	15, 321		„ memoirs relating to ....	15, 304
„ decomposition of, by Red Prussiate of Potash ....	15, 321		„ optical rotatory power of ....	15, 314
„ decomposition of, by Stannic Chloride ....	15, 316		„ physical properties of ....	15, 313
„ decomposition of, by Sulphuric acid ....	15, 316		„ preparation of ....	15, 311
„ decomposition of, by Sulphuric acid and Ox-gall ....	15, 322		„ sources of ....	15, 305
„ decomposition of, by vinous fermentation ....	15, 321		Dextrotartrate of Brucine ....	17, 583
„ estimation of ....	15, 313		„ Cinchonidine	17, 227, 229
„ formation of, from Cellulose ...	15, 309		„ Cinchonine ....	17, 217
„ formation of, from Dextrin ....	15, 306		„ Quinine ....	17, 291
„ formation of, from Dulcite ....	15, 309		„ Strychnine ....	17, 503
„ formation of, by decomposition of Glucosides ....	15, 309		Diabetic Sugar ....	15, 305
„ formation of, from Glycerin....	15, 310		Diacetin ....	9, 496
„ formation of, from Glucosan	15, 306		Diacetochlorhydrin ....	13, 580
			Diadochite ....	5, 246
			Diallage ....	3, 403
			Dialurate of Ammonia ....	19, 157
			„ Baryta ....	10, 158
			„ Potash ....	10, 158
			Dialuric acid ....	10, 155
			Diamagnetics, definition of ....	1, 168
			Diamagnetism ....	1, 515
			Diamond, artificial ....	2, 84
			„ conversion of, into coke at very high temperatures ....	2, 84
			„ natural occurrence of ....	2, 82
			„ properties of....	2, 84
			Diamylaniline ....	11, 332
			<i>Diana</i> , syn. of Silver ....	6, 132
			Diarachin ....	17, 374
			Diarsenate of Ammonia ....	4, 287
			„ Baryta ....	4, 300
			„ Lime ....	4, 304

Diarsenate of Magnesia ....	4, 307	Diethylaniline ....	11, 337
„ Potash ....	4, 291	Diethylene-diamine ....	13, 486
„ Soda ....	4, 297	Diethyl-urea ....	9, 291
„ Strontia ....	4, 302	Differences in compounds accord-	
„ Uranic Oxide ....	4, 313	ing to the grouping of their	
Diarsenide of Iron ....	5, 303	atoms ....	1, 98—111
„ Nickel ....	5, 389	Differential Thermometer ....	1, 226
Diarsenite of Baryta ....	4, 300	Diffuau ....	9, 448
„ Lime ....	4, 302	Diffusibility and density of gases,	
„ Potash ....	4, 291	relation between ....	1, 21
Diaspore ....	3, 306	Diffusion of gases through ani-	
Diastase ....	18, 455	mal membranes....	1, 25
„ effect of, on starch ....	7, 99	„ gases through caout-	
Diathermaney ....	1, 214	chouc ....	1, 25
Diatomic Gases ....	1, 53	„ gases through cracks	
Dibenzanilide ....	12, 156	in glass ....	1, 23
Dibenzoyl-glucose ....	15, 335	„ gases through ear-	
Dibenzoylimide....	12, 190	thenware ....	1, 24
Dibenzoylsulphophenylamide ....	12, 159	„ gases through gyp-	
Dibromide of Copper ....	5, 435	sum ....	1, 24
„ Mercury....	6, 42	„ gases, influence of	
Dibromochloride of Glyceryl ....	13, 578	density on ....	1, 21
Dibromonitracetonitrile ....	12, 550	„ gases and vapours	1, 20
Dibutyryn ....	10, 94	—26	
Dicarbonate of Cupric Oxide ....	5, 414	„ gases, Dalton's	
„ Lead-oxide ....	5, 122	theory of ....	1, 22
„ Lime ....	3, 185	„ liquids ....	1, 27—30
Dicetyl-phenylamine ....	16, 384	„ -tube ....	1, 20
Dichlorhydrin ....	9, 499	Diffuoride of Copper ....	5, 442
Dichloride of Carbon ....	8, 160	„ Mercury ....	6, 65
„ Copper ....	5, 438	Digestive salt ....	3, 56
„ Copper and Ammo-		Digitaletin ....	16, 328
nium ....	5, 453	Digitalic acid ....	16, 339
„ Copper and Barium	5, 463	Digitalin ....	15, 343; 18, 223
„ Copper and Potas-		„ -fat ....	14, 530
sium ....	5, 460	„ of Homolle ....	16, 333
„ Copper and Sodium	5, 462	„ Labourdais ....	16, 335
„ Mercury ....	6, 45	„ Lancelot, A.	
„ Selenium ....	2, 345	Buchner, and	
„ Silver ....	6, 162	others ....	16, 338
„ Sulphur ....	2, 331	„ Kosmann ....	16, 378
Dichroite ....	3, 434	„ memoirs relating to ....	16, 330
Dichromate of Lead-oxide ....	5, 169	„ of Nativelle ....	16, 336
„ Manganous Oxide	4, 247	„ Walz ....	16, 331
„ Zinc-oxide ....	5, 48	„ Homolle and Que-	
Dicyanide of Copper ....	8, 1	venne ....	16, 335
Didrimite ....	3, 452	Digitalinic acid ....	16, 339
Didymium ....	3, 280	Digitaliretin ....	16, 327
„ and lanthanum, sepa-		Digitaliretin, Glucosides of	16, 328
ration of, from ce-		„ of Kosmann ....	16, 338
rium ....	3, 260, 275	Digitalis, acrid principle of, A....	14, 531
„ Nitrate ....	3, 281	„ acrid principle of, B....	14, 531
„ Oxide ....	3, 280	Digitaloic acid ....	14, 529
„ Salts ....	3, 280	Digitalosmin ....	14, 532
„ separation of, from		Digitalis, fatty acids from	16, 341
lanthanum	3, 275, 280	Di-hypoiodite of Soda ....	3, 106
„ Sulphate ....	3, 281	Dika-bread, fat of ....	16, 391
Dielectrics ....	1, 312	Diliturate of Silver ....	10, 182
Diethylamylamine ....	11, 108	„ Potash ....	10, 182

Dilituric acid ....	10, 181	Diplatosammonium : Platinocya-	
Dimorphism ....	1, 18; and 98—102	nide ....	8, 45
Dimorphism, Ampère's explana-		Diplatosomethylamine ....	7, 318
tion of ....	1, 147	Diploite ....	3, 433
„ of Mercuric Iodide	6, 37	Dippel's oil ....	18, 256
Dimethylamine....	7, 319	Dipyrophosphate of Baryta ....	3, 145
Dimethyl-urea ....	7, 376	Disacryl ....	9, 368
Dimolybdate of Baryta....	4, 75	„ -resin ....	9, 369
Dimylaniline ....	11, 332	Discharge, electric ....	1, 315
Diniodide of Copper ....	5, 433	Diselenide of Copper ....	5, 432
„ and Potas-		Disilicate of Alumina ....	3, 411
sium ....	5, 460	„ Cerous Oxide ....	3, 408
„ Mercury ....	6, 34	„ Ethyl ....	8, 478
Diniodomethylamine ....	7, 319	„ Ferrous Oxide ....	5, 278
Dinitramidin ....	15, 110	„ Lime ....	3, 388
Dinitrammonyl....	12, 548	„ Magnesia....	3, 395
Dinitrobenzoic acid ....	12, 134	„ Yttria ....	3, 409
Dinitro-ethylates ....	12, 557	Disinfecting power of heat ....	7, 83
Dinitro-euxanthone ....	17, 183	Dispersion of colour ....	1, 164
Dinitrophenyl-citraconimide ....	11, 322	Distearin ....	17, 117
Dinitrosalithol ....	12, 271	Distillation ....	1, 288
Diopside ....	3, 402	„ black ....	7, 81
Diopase ....	5, 464	„ dry or destructive ....	7, 77
Diosmine ....	18, 194	„ of volatile oils ....	7, 159
Dioxide of Copper ....	5, 403	„ white ....	7, 81
„ Mercury ....	6, 5	Distilled Water ....	2, 61
Dioxymethylene ....	13, 389	„ Waters ....	7, 166
Dipalmitin ....	16, 377	Disulphate of Antimonic Oxide....	4, 361
Diphanine ....	11, 370	„ Cadmic Oxide ....	5, 58
Diphanite ....	3, 447	„ Uranous Oxide ....	4, 174
Diphenyl-urea ....	12, 166	Disulphide of Copper ....	5, 422
Diphocenin ....	11, 76	„ „ with Oxan-	
Diphosphate of Ammonia ....	2, 44	thate of	
„ Lime ....	3, 194	copper....	8, 464
„ Magnesia ....	3, 233	„ Iron ....	5, 227
„ Soda ....	3, 91	„ Lead ....	5, 132
„ Uranous Oxide....	4, 171	„ Mercury ....	6, 19
„ Zinc-oxide ....	5, 18	„ Nickel ....	5, 369
Diphosphide of Copper....	5, 417	„ Phosphorus ....	2, 209
Diphosphite of Lime ....	3, 191	Dithionic acid ....	2, 174
Diplatinamine ....	6, 315	Dithionous acid, <i>see</i> Hyposulphu-	
„ Bichlorhydro-chlo-		rous acid.	
platinate ....	6, 319	Divalerin ....	11, 76
„ Bichlorhydro-ni-		Diviniline ....	11, 307
trate ....	6, 311	Diolein ....	17, 85
„ Bichlorhydro-sul-		Döbereiner's Instantaneous	
phate ....	6, 318	Light Machine ....	2, 50, 57
„ Chlorhydro-nitrate	6, 318	Döbereiner's Vinegar-lamp....	8, 207
„ Hydrochlorates		Doeglic acid ....	17, 179
	6, 305, 316	„ Ether ....	17, 180
„ Nitrates	7, 311, 316	Doegling Train-oil ....	17, 180
„ Sesquichlorhydro-		Dog-bile, preparation of Tauro-	
carbonate	6, 309, 317	cholic acid from ....	18, 65
„ Sesquichlorhydro-		Dog-fat ....	16, 391
nitrate ....	6, 312	Dolerite ....	3, 461
„ Sesquichlorhydro-		Dolomite ....	3, 253
phosphate	6, 309, 318	Dolphin-oil ....	16, 323
Diplatosamine, Hydrochlorate	6, 300	„ preparation of Vale-	
„ Nitrate ....	6, 310	rianic acid from ....	11, 25



Donacargyrite ....	6, 195	Drying ....	1, 271
<i>Dorema armeniacum</i> , resin of ....	17, 396	„ oils ....	16, 308
Double elective affinity....	1, 119	„ alteration of by ex- posure to the air....	7, 242
„ refined culinary Salt ....	3, 56	Dryness, effect of, in preventing fermentation and putrefaction	7, 100, 116
„ refraction ....	1, 164	Dry pile ....	1, 426
„ refraction of Light ....	1, 164	Dry rot in wood ....	15, 157
„ salts ....	2, 13	Dulcamarine ....	18, 98
<i>Dracæna Draco</i> , resin of ....	17, 387	Dulcitartarate of Lime ....	15, 388
Dracin ....	17, 387	Dulcitan ....	15, 387
Dracol ....	12, 261	Dulcite ....	15, 384, 543
<i>Draco mitigatus</i> ....	6, 45	„ formation of Glucose from ....	15, 309
Draconyl ....	12, 6	Dulcetyl, Bistearate ....	9, 25; 17, 128
„ chloride ....	14, 216	„ Quidristearate ....	17, 128
Dracyl ....	12, 226	Dulong and Petit's law of the specific heats of elemen- tary atoms ....	1, 243
Dragon's Blood ....	17, 387, 618	Dumasin ....	9, 25; 13, 473
„ preparation of Toluene from....	12, 227	Dumas' theory of substitution and types ....	7, 15
Dreelite ....	3, 218	Dung, humous substances from	17, 476
Drummond's Light ....	2, 29	Dutch liquid ....	8, 376
Dry Copper ....	6, 399	Dynamic hypothesis as to the origin and nature of the phe- nomena of affinity ....	1, 158
Dry or destructive Distilla- tion ....	7, 77	Dyslysin ....	18, 30
Dry distillation of Organic Sub- stances, formation of Marsh- gas by ....	7, 251	Dyspeptone ....	18, 338
<i>Dryabalanops Camphora</i> , borne- cene from the camphor-oil of ....	14, 311		
<i>Dryabalanops Camphora</i> , oil of ....	14, 355		

## E.

Earth, animal ....	3, 192	Ebullioscopes ....	8, 261
„ heavy ....	3, 134	Ebullition ....	1, 272
„ of tartar, foliated ....	8, 297	„ jumping or percussive	1, 276
„ almond oil ....	17, 95	Ecbalin....	17, 367; 18, 194
Earthenware ....	3, 419	<i>Ecbalium Elaterium</i> , Elaterin in the fruit of ....	17, 364
„ diffusion of gases through ....	1, 24	„ <i>Elaterium</i> , preparation of prophetin from ....	17, 366
„ endosmose through	1, 28	Egonine ....	16, 303
Earth-metals ....	3, 2	<i>Echium vulgare</i> , ferment-oil of	14, 405
„ compounds of, with alcohol-radicals	13, 492	Educts of decomposition ....	1, 111
Earthnut-oil, preparation of ara- chidic acid from	17, 370	Edwardsite ....	3, 265
„ preparation of phy- setoleic acid from	16, 317	Efflorescence ....	1, 13; 2, 64
Earth-resin from Bucaramanga	17, 435	Egg, composition of enveloping membrane of ....	18, 348
Earths ....	2, 39	Egg-albumin ....	18, 281
„ absorbent or alkaline ....	3, 133	Eggs of birds, colouring matter of	18, 415
„ electrolysis of ....	1, 458	„ of lizards and serpents, phosphorescence of ...	1, 183
Earthy alkalis ....	3, 133	„ oil of ....	17, 96
„ cobalt ....	5, 347	„ preservation of ....	7, 116
„ cobalt, manganese in	4, 195, 204	Egg-yolk, colouring matter of ....	18, 414
East Indian grass oil ....	14, 368	„ lecithine obtained from	18, 374
Eau de Cologne ....	7, 168	Egyptians, chemical knowledge of	1, 3
Eblanin, <i>see</i> Pyroxanthin.		Eichwald's Acid-albumin ....	18, 343

- Eichwald's Mucus-peptone ... 18, 344  
 Eight-sevenths Sulphide of Iron 5, 230  
 Einhof's Vegetable Wax ... 12, 3  
 Ekebergite ... 3, 437  
 Elaeolite ... 3, 431  
*Elaeocarpus copaliferus*, copal  
   obtained from ... 17, 405  
 Elaene ... 13, 367  
 Elaidamide ... 17, 102  
 Elaidate of Ethyl ... 17, 84  
   " of Methyl ... 17, 83  
 Elaidates, metallic ... 17, 77  
 Elaidic acid ... 17, 74  
 Elaïdin... 17, 74, 99  
   " formation of, from olive oil 17, 75  
 Elaierin ... 16, 400  
 Elaldehyde ... 8, 281; 13, 441  
 Elastic fluids, development of  
   light in, by compression ... 1, 205  
   " dielectric properties of... 1, 313  
 Elasticity and density of gases,  
   relation between ... 1, 257  
   " of gases ... 1, 257  
 Elater, phosphorescence of ... 1, 183  
 Elateric acid ... 17, 367  
 Elateride ... 17, 367  
 Elaterin ... 17, 364  
 Elathine ... 9, 11, 13  
 Elayl ... 8, 164  
 Elayl, Chloride of ... 8, 377  
 Elayl-stannethyl ... 9, 100  
 Elder-flower oil ... 14, 368  
 Elecampane-root, preparation of  
   inulin from ... 15, 112  
   " wax... 18, 160  
 Elective affinity... 1, 33, 117  
   " double... 1, 119  
   " reciprocal or alternating ... 1, 125  
 Elective attraction ... 1, 33  
 Electric Calamine ... 1, 320  
   " currents, heat developed  
     by ... 1, 315  
   " currents, influence of  
     the intensity of, on  
     decomposition ... 1, 439  
   " current, magnetic effects  
     of ... 1, 317  
   " current, Ohm's formulæ  
     relating to the quantity of ... 1, 414  
   " current produced by two  
     metals and one liquid,  
     quantity of ... 1, 376  
   " current, mode of studying  
     physiological effects of 1, 462  
   " current, relation between  
     the quantity of, and  
     the quantity of liquid  
     decomposed ... 1, 435  
 Electric current of the voltaic  
   battery, tension and  
   quantity of, when de-  
   composing cells are in-  
   troduced ... 1, 480  
   " currents in the animal  
     body and in plants ... 1, 336  
   " currents, instruments for  
     the production of, by  
     means of chemical ac-  
     tion ... 1, 408  
   " discharge ... 1, 315  
   " discharges, decomposi-  
     tions produced by re-  
     peated ... 1, 430  
   " fishes ... 1, 429  
   " fluids ... 1, 309  
   " machine ... 1, 328  
   " machine, decomposition  
     produced by the cur-  
     rent of the ... 1, 437  
   " multiplier or galvano-  
     meter ... 1, 317  
   " non-conductors or insu-  
     lators ... 1, 312  
   " polarisation ... 1, 473  
   " shock ... 1, 315  
   " spark ... 1, 315  
 Electricities, combination of the  
   two, with one another ... 1, 314  
 Electricity of capillarity? ... 1, 319  
   " of the solar rays? ... 1, 319  
   " chemical relations of 1, 314  
   " combinations brought  
     about by ... 1, 429  
   " of combustion ... 1, 329  
   " common ... 1, 324  
   " conductors of ... 1, 310  
   " by contact, explana-  
     tion of ... 1, 155  
   " of crystals ... 1, 319  
   " decompositions pro-  
     duced by ... 1, 430  
   " development of ... 1, 318  
   " development of, in  
     decompositions by  
     double affinity ... 1, 341  
   " development of, in  
     decompositions by  
     simple affinity ... 1, 340  
   " development of, by  
     chemical combination 1, 328  
   " development of, by  
     combinations ac-  
     companied by de-  
     compositions ... 1, 340

Electricity, development of, by decompositions effected by heat or light .... 1, 336	Electrolysis produced by the cur- rent of the ordi- nary electrical ma- chine .... 1, 437
„ development of, in detonations .... 1, 340	„ of liquids, develop- ment of heat in 1, 496
„ development of, in the evaporation of saline solutions .... 1, 337	„ several liquids in contact with one another .... 1, 465
„ development of, by magnetic action .... 1, 318	„ two liquids in two divisions .... 1, 466
„ development of, by pressure .... 1, 324	„ two liquids in three divisions, one liquid in the middle, and the other two in the exterior divi- sions .... 1, 469
„ development of, in the escape of steam 1, 338	„ three liquids .... 1, 471
„ development of, in the vital process .... 1, 429	„ individual com- pounds :
„ in fermentation .... 1, 341	„ aqueous solutions of iodine, bro- mine, and chlo- rine .... 1, 451
„ by friction .... 1, 324	„ hydrated oxygen- acids .... 1, 451
„ influence of, on che- mical combination 1, 37, 154	„ hydrated hydro- gen acids .... 1, 455
„ imperfect conductors or semi-conductors of .... 1, 311	„ metallic sul- phides, iodides, bromides, chlo- rides, cyanides, sulpho-cyanides, and ferrocya- nides .... 1, 456
„ influence of, on che- mical decomposition 1, 117	„ alkalis and earths 1, 458
„ influence of, on the chemical nature of ponderable sub- stances .... 1, 429	„ heavy metallic ox- ides .... 1, 459
„ by induction .... 1, 318	„ oxygen - salts of the alkalis and earths .... 1, 459
„ latent or quiescent.... 1, 314	„ oxygen - salts of heavy metallic oxides .... 1, 463
„ memoirs relating to 1, 304	„ water .... 1, 446
„ relation of, to light 1, 167	„ water, develop- ment of an odo- rous substance in .... 1, 449
„ of small tension, de- compositions pro- duced by continuous discharge of .... 1, 430	Electrolyte, influence of the tem- perature and com- pression of the, on its decomposi- tion .... 1, 444
„ statical .... 1, 314	„ influence of the che- mical nature of the, on its decom- position .... 1, 442
„ theories of .... 1, 309	
Electro-chemical and purely che- mical action, distinc- tion between .... 1, 343	
„ -chemical theories .... 1, 154	
„ -chemical theory of com- bustion .... 2, 37	
„ -deposition of metals 1, 497—510	
Electrodes, influence of the che- mical nature of, on decomposition .... 1, 445	
„ influence of the sur- face of the, on de- composition .... 1, 446	
Electro-gilding.... 1, 497	
Electro-negative and electro- positive elements .... 1, 155	
Electrophorus .... 1, 318	
Electro-plating.... 1, 501	
Electrolysis .... 1, 431	



- Electrolyte, influence of the relative volume of, on its decomposition .... 1, 445
- Electrolytes .... 1, 43, 433
- Electrotype .... 1, 502—510
- Electrum .... 6, 247; 17, 430
- Elemi oil .... 14, 289
- „ oil, liquid hydrochlorate of .... 14, 290
- „ resin .... 17, 413
- Elementary analysis of organic compounds .... 7, 86
- „ substances, heat-capacity of the atoms of .... 1, 243
- Elements, atomic weights of .... 1, 43
- „ attachment of, to nuclei .... 7, 20
- „ chemical symbols of .... 1, 50
- „ division of, into metals and metalloids .... 2, 1
- „ electro-negative .... 2, 18
- „ electro-negative and electro-positive .... 1, 155
- „ electro-positive .... 2, 19
- „ grouping of, according to physical and chemical relations.... 2, 1
- „ liquid and solid, specific heat of .... 1, 241
- „ list of .... 1, 50
- „ mode of combination of, in organic compounds .... 7, 7
- „ non-metallic, classification of .... 2, 18
- „ non-metallic, enumeration of .... 2, 1, 18
- „ number of, in organic compounds .... 7, 6
- „ relations between atomic weights and densities of .... 1, 52—64
- Elephant fat .... 16, 391
- Ellagates .... 16, 187
- Ellagic acid .... 16, 183
- Elm leaves, reddened, tannic acid from .... 15, 533
- Emerald .... 3, 427
- „ Copper .... 5, 464
- „ Nickel .... 5, 366
- Emetine .... 17, 379
- Emmonite .... 3, 319
- Emodin .... 16, 176
- Empois* .... 15, 95
- Empyreumatic oil of Tobacco .... 14, 234
- „ Tar .... 7, 81
- Emulsin .... 18, 455
- Emydin .... 18, 385
- Enamel.... 3, 382
- Enamels .... 5, 180
- Endosmose .... 1, 28
- English Turpentine, commercial 18, 19
- Engraved copper plates, electro-type copies of .... 1, 506
- Enodic aldehyde .... 14, 529
- Envelope-atoms .... 7, 148
- „ -nuclei .... 7, 148, 170
- Euödin .... 16, 521
- Enveloping membrane of the egg, composition of .... 18, 348
- Epibichlorhydrin .... 13, 577
- Epibromhydrin.... 13, 575
- Epichlorhydrin? .... 9, 499
- Epidermis, action of boiling water on.... 18, 349
- „ composition of .... 18, 348
- Epidermose .... 18, 323
- Epidichlorhydrin .... 13, 577
- Epidote.... 3, 429
- „ manganesian .... 3, 430
- Epiglycerobitartrac acid .... 13, 582
- Epistilbite .... 3, 443
- Epithelium, composition of .... 18, 348
- „ of the mucous membrane of whale-bone, action of acetic acid on .... 18, 351
- Epsom salts .... 3, 236
- Equisetum fluviatile*, preparation of aconitic acid from .... 11, 403
- Equivalents, chemical .... 1, 42
- „ Gerhard's .... 7, 27
- Equivalent volume, the reciprocal of the atomic number .... 1, 74
- Erbia salts .... 3, 292
- Erbium and Terbium .... 3, 291
- Eremecausis .... 7, 91
- Eremecausis, assisted by heat and light.... 7, 95
- Ergotic acid .... 18, 194
- Ergotine .... 18, 194
- Ergot-of-rye, oil of .... 17, 96
- „ -sugar .... 16, 301
- Erica herbacea*, Ericolin in .... 16, 28
- „ *vulgaris*, ferment-oil of.... 14, 406
- Ericinol .... 16, 29
- Ericolin .... 16, 201
- Erinite .... 5, 471
- Erker, Lazarus .... 1, 4
- Erucadic acid .... 17, 552
- Erucates .... 17, 551
- Erucic acid .... 17, 549
- Erucine.... 14, 528
- Eryglucin .... 12, 385

<i>Erysimum alliaria</i> , oil from root of ....	10, 55	Ether, Amyl-palmitic ....	16, 380
<i>Erythræa Centaurium</i> , ferment oil of....	14, 405	„ Amyl-stearic ....	17, 123
Erythrarsin ....	9, 350	„ Benzacetic ....	12, 52
Erythrate of Methyl ....	12, 372	„ Benzylic ....	12, 16
Erythric Acid ....	12, 381	„ Benzylovinic ....	12, 17
„ Ether....	12, 373	„ Bichlorovinic, combina- tion of chloride of ben- zoyl with ....	12, 111
Erythrin ....	12, 373	„ Binitroethylic ....	12, 560
„ -bitter ....	12, 380	„ Butylic ....	10, 69
Erythrocentaurin ....	18, 224	„ Caprylic ....	13, 183
Erythrodanum, <i>see</i> Alizarin.		„ Capryl-stearic ....	17, 124
Erythroglucin ....	12, 385	„ Cetyl-acetic ....	16, 375
Erythroleic Acid ....	12, 359	„ Cetyl-benzoic ....	16, 381
Erythrolein ....	12, 369	„ Cetyl-butyric ....	16, 379
Erythrolitmin ....	12, 370	„ Cetylic ....	16, 342
Erythromannite ....	12, 385	„ Cetyl-succinic ....	16, 379
<i>Erythronium</i> ....	4, 80	„ Chloroentanthic ....	12, 460
Erythrophyll ....	17, 1	„ Chlorosulphuretted ....	9, 225
Erythroretin ....	16, 176	„ Ethyl-benzolic ....	12, 221
Erythrosin ....	18, 406	„ Ethyl-benzylic ....	12, 17
<i>Erythroxyton Coca</i> , preparation of Cocaine from the leaves of	16, 300	„ Ethyl-butylic ....	10, 70
Erythrozym, action of, on milk-sugar ....	15, 224	„ Ethyl-caprylic ....	13, 199
„ action of, on rubian	14, 135; 16, 37	„ Ethyl-cetylic ....	16, 375
Erythrozym, preparation of	16, 64	„ Ethylic ....	8, 171
Erythrylin ....	12, 384	„ „ action of chlorine on ....	7, 35
<i>Escholtzia</i> , acrid alkaloid of	17, 162	„ „ action of sulphuric acid on ....	10, 518
„ bitter alkaloid of	17, 163	„ „ combinations of	8, 189
Esculin, <i>see</i> Aesculin.		„ „ decomposition of, by bromine ....	8, 185
Esenbeckin ....	18, 225	„ „ decomposition of, by chloric or bromic acid ....	8, 186
Esmarkite ....	3, 435	„ „ decomposition of, by chlorine ....	8, 183
Eserine....	17, 595	„ „ decomposition of, by heavy metallic oxides ....	8, 189
Essene, Oxide of	12, 85	„ „ decomposition of, by hydriodic acid gas ....	8, 187
<i>Ester</i> ....	7, 190, 215	„ „ decomposition of, by hydrochloric acid gas ....	8, 187
Ethal ....	16, 343	„ „ decomposition of, by metallic chlorides ....	8, 187
„ preparation of lauric acid from ....	15, 46	„ „ decomposition of, by nitric acid	8, 186
„ preparation of palmitic acid from ....	16, 354	„ „ decomposition of, by phosphorus	8, 186
Ethalone, <i>see</i> Palmitone.		„ „ decomposition of, by potash-lime	8, 189
Ethamine ....	9, 56	„ „ decomposition of, by potassium and sodium ....	8, 189
Ethamaniline ....	11, 331		
Ethamyl ....	11, 5		
Ethaniline ....	11, 305		
„ -urea....	11, 323		
Ethene ....	8, 164		
„ -sulphuric acid, formation of ....	13, 420		
Ethenides ....	7, 23		
Ether ....	8, 171		
„ Acetobenzolic ....	12, 223		
„ Amyl-benzolic ....	12, 222		
„ Amyl-caprylic ....	13, 202		
„ Amyl-cetylic ....	16, 379		
„ Amylic ....	11, 7		
„ Amyl-oenanthylic ....	13, 202		

Ether, Ethylic, decomposition of, by rapid combustion ....	8, 178	Ether, Methyl-oleic ....	17, 82
„ „ decomposition of, by a red heat ....	8, 177	„ „ -palmitic ....	16, 373
„ „ decomposition of, by slow combustion ....	8, 178—183	„ „ -stearic ....	17, 114
„ „ decomposition of, by sulphuric acid ....	8, 186	„ Muriatic ....	8, 368
„ „ decomposition of, by terfluoride of chromium ....	8, 188	„ Nitrous ....	8, 468
„ „ formation of ....	8, 171	„ Cœnanthic ....	12, 457
„ „ mixtures of, with alcohol ....	8, 273	„ Perchlorinated, comburent properties of ....	10, 537
„ „ preparation of....	8, 172	„ Perchloroxalic ....	9, 243
„ „ solution of volatile oils in ....	7, 169	„ Sulphuric ....	8, 413
„ „ supposed relative position of atoms in ....	7, 33	„ Sycoceryl-acetic....	17, 44
„ „ tribasic sulphate of ....	10, 518	„ „ -benzoic ....	17, 45
„ „ vapour - tension of, at different temperatures ....	1, 262	„ Valerianic ....	11, 71
„ „ and water, formation of, from alcohol ....	8, 225	„ Valerobenzolic ....	12, 224
„ Ethyl-œnanthylic ....	13, 199	„ Vinamylic ....	11, 8
„ Ethyl-stearic ....	17, 115	„ Vinic, <i>see</i> Ether Ethylic.	
„ Hydriodic ....	8, 385	„ „ Bichlorinated ....	9, 197
„ Hydrobromic ....	8, 385	„ „ Bisulphuretted ....	9, 184
„ Hydrochloric ....	8, 386	„ „ Monochlorinated ....	9, 192
„ Hydrochloric, bi-chlorinated ....	9, 193	„ „ Perchlorinated ....	9, 216
„ Hydrochloric, heavy ....	8, 373	„ Vinobenzyllic ....	12, 17
„ „ light ....	8, 368	„ Vinobutyllic ....	10, 70
„ „ monochlorinated ....	8, 375	„ Vinomethyllic ....	8, 192
„ „ quadrichlorinated ....	9, 213	Ethereal liquid distilled from ripe quinces....	12, 459
„ „ terchlorinated ....	9, 199	„ nitrous gas ....	8, 217
„ Hydroselenic ....	8, 356	„ substances ....	1, 160
„ Hydrosulphuric....	8, 337	Etheric acid ....	8, 180
„ „ quadrichlorinated ....	9, 214	Etherification ....	8, 225; 13, 416
„ Indigotic ....	12, 312	„ theory of ....	8, 231
„ Mesitic ....	9, 25	Etherin....	8, 164; 13, 176
„ Metacetic ....	9, 49	„ first Hydrate of ....	8, 171
„ Methamylic ....	11, 8	Ethers, action of phosphorus terchloride on ....	10, 487
„ Methylbenzolic ....	12, 221	„ classification of ....	7, 190
„ Methyl-caprylic....	13, 198	„ compound, action of alkaline hydrates on ....	13, 380
„ Methyllic ....	7, 256	„ compound, formation of ....	7, 35
„ Methyl-elaidic ....	17, 82	„ compound, formed by oxygen-acids ....	7, 215
„ „ -œnanthylic ....	13, 198	„ constitution of....	7, 189
		„ ethylic, of oxygen-acids, <i>see</i> the several Ethyl-salts.	
		„ mixed ....	7, 191
		„ tables of expansion of, by heat ....	1, 226—230
		„ of the third class, composition, and formation of ....	7, 215
		„ tabular view of ....	7, 218
		„ Amylic ....	7, 220
		„ Bibromacetic ....	13, 532
		„ Glycolic ....	13, 424
		„ Hydriodic, action of, on sulphocyanides ....	13, 413
		„ Hydriodic, decomposition of cyanides by ....	13, 408
		„ Methyllic ....	7, 218



Ethers, Vinic or Ethylic	....	7, 218	Ethyl, Camphorate	....	14, 464
Ethide, Stannic	....	13, 506	„ Camphorate, chlorinated	....	14, 466
Ethionates	....	8, 433	„ Caprate	....	14, 489
Ethybromaniline	....	11, 309	„ Caproate	....	11, 419
Ethychloraniline	....	11, 309	„ Caprylate	....	13, 201
Ethyl	....	8, 168	„ Carbamate	....	9, 274
„ Abietate	....	18, 7	„ Carbohydrokinonate	....	16, 240
„ Acetate	....	8, 493	„ Carbolate	....	12, 270
„ Acetate, action of chlorine	....		„ Carbonate	....	8, 392
on	....	13, 534	„ Carbonate, formation of		
„ Acetate, formation of, by			urea by the action of		
the action of chlorine			ammonia on	....	13, 402
on alcohol	....	8, 212	„ Carminate ?	....	16, 209
„ Aconitate	....	11, 408	„ Cerotate	....	18, 138
„ Acrylite	....	9, 372	„ Chloranisate	....	13, 136
„ Adipate	....	11, 424	„ Chloride	....	8, 367
„ Alcohol, formation of, in			„ Chlorobenzoate	....	12, 115
vinous fermentation	....	15, 265	„ Chlorocerotate	....	18, 140
„ Alcohol and Ethers,			„ Chlorocyanide ?	....	8, 492
expansion of, by heat			„ Chlorocyanurate	....	13, 563
		1, 226—232	„ Chloroferrocyanide	....	9, 354
„ Allophanate	....	9, 267	„ Chloroniceate	....	11, 178
„ Amidobenzoate	....	12, 148	„ Chloronitrobenzoate	....	12, 139
„ Amidocuminate	....	14, 176	„ Chloropropionate	....	13, 560
„ Amygdalate	....	15, 430	„ Chloropyromucate	....	10, 387
„ Anchoate	....	13, 376	„ Chlorosuberate	....	13, 214
„ Angelate	....	10, 417	„ Chlorosulphate	....	13, 455
„ Anisate	....	13, 130	„ Cholate	....	18, 56
„ Arachidate	....	17, 373	„ Chrysanisate	....	12, 303
„ Benate	....	17, 560	„ Cimicate	....	16, 286
„ Benzoate	....	12, 60	„ Cinnamate	....	13, 281
„ Benzylate	....	12, 17	„ Citraconate	....	10, 423
„ Biborate	....	8, 396	„ Citrate	....	11, 463
„ Bibromacetate	12, 535 ; 13, 532		„ Comenaminate	....	11, 395
„ Bibromobutyrate	....	10, 138	„ Cuminate	....	14, 155
„ Bichlorobutyrate	....	10, 142	„ Cyanate	....	8, 486
„ Bichlorocarbonate	....	9, 225	„ Cyanate, hydrochlorate of	13, 563	
„ Biniodide	....	8, 362	„ Cyanide	....	8, 486
„ Binitrobenzoate	....	12, 136	„ Cyanide, compound of,		
„ Binitrocuminate	....	14, 172	with chloride of car-		
„ Binitroethylate	....	12, 560	bonyl	....	13, 457
„ Bioxysulphocarbonate	....	8, 441	„ Cyanide, compound of,		
„ Bisilicate	....	8, 481	with metallic chlorides	13, 457	
„ Bisulphide	....	8, 351	„ Cyanurate	9, 459 ; 13, 562	
„ Bitelluride	....	8, 387	„ Disilicate	....	8, 478
„ Borate	....	12, 513	„ Doeglitate	....	17, 180
„ Borate, terbasic	....	8, 394	„ Elaidate	....	17, 84
„ Bromacetate	....	12, 534	„ Ethyltrithionate	....	12, 515
„ Bromanisate	....	13, 134	„ Eugenate	....	14, 211
„ Bromide	....	8, 365 ; 12, 512	„ Everninate	....	16, 446
„ Bromide, action of mer-			„ Erythrate	....	12, 373
curic oxide on	....	13, 417	„ Ferridecyanide ?	....	9, 354
„ Bromide, action of water			„ Ferrocyanide	....	9, 353
on	....	13, 418	„ Fluoride ?	....	8, 382
„ Bromide, preparation of	13, 451		„ Formiate	....	8, 482
„ Bromide and Iodide of,			„ Formiate, tribasic	....	9, 360
action of, upon alcohol	13, 418		„ Fulminurate	....	10, 561
„ Butyracetate	....	10, 556	„ Fumarate	....	10, 31
„ Butyrate	....	10, 91	„ Gaedinate	....	16, 320

Ethyl, Hippurate ....	12, 81	Ethyl, Perchlorosuccinate ....	10, 143
„ Hydrated oxide of ....	8, 194	„ Phosphate ....	8, 399
„ Hydride ....	8, 168	„ Phosphate, tribasic ....	9, 358
„ Hydride, its coefficients of absorption in water ....	13, 414	„ Picrate ...	11, 227
„ Hydrosulphate ....	8, 340	„ Physetoleate ....	16, 319
„ Hypogaëate ....	16, 319	„ Pimelate ....	12, 465
„ Iodacetate ....	13, 530	„ Platinocyanide ....	13, 459
„ Iodide ....	8, 358; 12, 512	„ Plumbides ....	9, 106
„ Iodide, action of mercuric oxide on ....	13, 417	„ Propionate ....	9, 409; 10, 556
„ Iodide, action of, on sil- ver salts ....	13, 451	„ Pyromucate ....	10, 386
„ Iodide, action of water on	13, 418	„ Pyrotartrate ....	11, 100
„ Iodide, preparation of ....	13, 451	„ Ricinelaïdate ....	17, 144
„ Jalapinolate ....	16, 403	„ Ricinoleate ....	17, 143
„ Kinate ....	16, 234	„ Roccellate ....	16, 478
„ Lactate ....	11, 496	„ Salicylate ....	12, 259
„ Lactate, with chloride of calcium ....	11, 497	„ Sebate ....	14, 499
„ Laurate ....	15, 49	„ Selenide ....	8, 356
„ Lecanorate ....	12, 373	„ Stearate ....	17, 115
„ Malamate (aspartate ?)....	10, 239	„ Suberate ....	13, 213
„ Malate ....	10, 227	„ Succinate ....	10, 133
„ Mercuric ....	13, 512	„ Sulphate ....	8, 413
„ Mesaconate ....	10, 433	„ Sulphide ....	8, 337; 13, 450
„ Monochloracetate ....	12, 539	„ Sulphide, action of chlorine on ....	10, 513
„ Monosilicate ....	8, 480	„ Sulphide, Bichlorinated	10, 513
„ Mucate ....	11, 510	„ Sulphide, compound of with Mercuric Iodide....	13, 450
„ Myristate ....	16, 215	„ Sulphide, Terchlorinated	10, 514
„ Nitransiate ....	13, 140	„ Sulphide, Tetrachlori- nated ....	10, 514
„ Nitrate ....	8, 475; 13, 456	„ Sulphite ....	8, 405
„ Nitrate, action of alkaline hydrates on ....	13, 388	„ Sulphobenzoate ....	12, 62
„ Nitrite ....	8, 468	„ Sulphobenzolate....	11, 156
„ Nitrobenzoate ....	12, 128	„ Sulphocarbonate ....	8, 465
„ Nitrocaprylate ....	13, 218	„ Sulphocyanide ....	8, 489; 13, 461
„ Nitrochloroniceate ....	11, 204	„ Sulphonaphthalate ....	14, 506
„ Nitrocinnamate....	13, 301	„ Sulphosalicylate ....	12, 281
„ Nitrotoluylate ....	13, 25	„ Tartramate ....	10, 344
„ Œnanthylate ....	12, 454	„ Tartrate ....	10, 343
„ Oleate ....	17, 83	„ Telluride ....	8, 383
„ Opianate ....	14, 433	„ Terebilate ....	12, 469
„ Orsellate ....	12, 373	„ Thiacetate ....	9, 356
„ Oxalate ....	9, 178	„ Toluylate ....	13, 10
„ Oxalate, formation of glu- cose from ....	15, 310	„ Valerate ....	11, 71
„ Oxatolylate ....	17, 154	„ Veratrate ....	13, 355
„ Oxide ....	8, 171	„ Xanthate ....	8, 439
„ Oxide, action of sulphuric anhydride on ....	12, 483	„ and Barium, Phosphites	9, 360
„ Oxide, compound of, with zinc-methyl ....	13, 397	Ethyl and Silver, Cyanide of	13, 458
„ Oxysulphocarbonate ....	8, 439	Ethylacetamide....	9, 246
„ Oxysulphocyanide ....	8, 490	Ethylacetone ....	13, 473
„ Palmitate ....	16, 375	Ethyl-allyl-ether ....	13, 539
„ Pelargonate ....	13, 372	„ -allyl-urea ....	13, 516
„ Perchlorate ....	8, 467	Ethylamine ....	9, 56
„ Perchlorocarbonate ....	9, 226	„ compounds of, with protochloride of pla- tinum ....	9, 61
		„ formation ....	13, 479
		„ Hydrochlorate of, with cyanide of mercury	9, 62

Ethylamine, Molybdate....	13, 481	Ethyldiacetamide ...	9, 247
„ Oxalate ....	9, 172	Ethylene ....	8, 162
„ Phosphomolybdate ...	13, 481	„ Acetate ....	12, 502
„ salts ....	9, 59	„ Acetate, Basic ? ...	13, 430
„ separation of, from		„ Acetobutyrate ....	13, 433
„ ammonia ....	13, 480	„ Biacetate ....	13, 430
„ Sulphate ....	13, 480	„ Bibenzoate ...	13, 433
„ and Magnesium, phos-		„ Bibromide ....	8, 366
„ phate of ....	13, 480	„ Bibromide and Brucine,	
„ -alum ....	13, 481	„ compounds obtained	
Ethyl-ammonia....	9, 56	„ from ....	17, 588
Ethylammonium, Platinocyanide	13, 458	„ Bibromide and Strych-	
Ethylamyl ....	10, 564	„ nine, compounds ob-	
Ethylamylaniline ....	11, 331	„ tained from ....	13, 512
Ethylaniline ....	11, 305	„ Bibutyrate ....	13, 432
„ -urea ....	11, 333	„ Bichloride ....	8, 376
Ethylate of Benzyl ....	12, 17	„ Biethylate ....	13, 427
„ Benzylene....	12, 221	„ Biniodide ....	8, 362
„ Butyl ....	10, 70	„ Bistearate 13, 434; 17, 116	
„ Ethylene 12, 519; 13, 426		„ Bisulphide ....	8, 354
„ Methyl ....	8, 192	„ Chloride, preparation of 10, 515	
„ Octyl ....	13, 199	„ Decasulphide ? ...	8, 355
„ Sodium ....	13, 420	„ Ethylate 12, 519; 13, 426	
Ethylated Sulphuric acid	13, 414	„ formation of alcohol	
Ethyl-bases containing arsenic		„ from ....	10, 511
„ and phosphorus ....	13, 492	„ Hydrate ....	12, 501
Ethyl-benzolic ether ....	12, 221	„ Hyposulphite ? ...	8, 404
„ -benzylic ether ....	12, 17	„ Methylate ....	12, 520
Ethyl-bibromallylamine	13, 550	„ Methylethylate ....	12, 520
Ethyl-bibromosalicylic acid	12, 290	„ Monoacetate....	13, 429
Ethyl-bichlorosalicylic acid	12, 299	„ Oxalate ....	13, 432
Ethyl-bicinnamylamine	13, 307	„ Oxide ....	13, 424
Ethyl-binitrosalicylic acid	12, 319	„ Sulphocyanide 10, 521; 13, 461	
Ethyl-binitrophloretic acid	13, 333	„ supposed relative posi-	
Ethyl-bromosalicylic acid	12, 286	„ tion of atoms in ....	7, 32
Ethyl-brucine ....	17, 587	„ Tetrasulphide ....	8, 354
Ethyl-butyl ....	10, 563	„ and Hydrogen, Sulphide	
„ -butylic ether ....	10, 70	„ of ....	8, 403
„ -camphoric acid ....	14, 465	„ -bases ....	13, 485
„ -caprylic ether ....	13, 199	„ -biamine ....	13, 486
„ -carbohydrokinonic acid ....	16, 240	„ -brucine ....	17, 589
„ -cetylic ether ....	16, 375	„ -diamine ....	13, 486
Ethyl-chinoline ....	13, 254	„ -gas, effect of, in retard-	
Ethyl-codeine ....	17, 42	„ ing the combustion of	
Ethyl-collidine ....	13, 149	„ detonating gas in con-	
„ -comenic acid ....	11, 389	„ tact with platinum, &c. 2, 53	
„ -compounds, conjugated,		„ -gas and Iodine, com-	
„ containing antimony ...	9, 79	„ bination of, in sun-	
„ -compounds, conjugated,		„ shine ....	1, 170; 8, 362
„ containing arsenic ....	9, 70	„ gas, solubility of, in	
„ -compounds, conjugated,		„ alcohol ....	8, 273
„ containing bismuth ....	9, 86	„ air, ozonized ....	8, 182
„ -compounds, conjugated,		„ -stannethyl ....	9, 100
„ containing lead... ..	9, 106	„ -strychnine, hydrate of 17, 513	
„ compounds, conjugated,		„ -strychnine, hydrobro-	
„ containing mercury ....	9, 109	„ mate ....	17, 512
„ -compounds, conjugated,		Ethyl-glycol ....	13, 426
„ containing tin ....	9, 91	„ -glucose ....	15, 331
Ethylconine ....	13, 170	„ -glycerin ....	12, 503



Ethyl-hemipinic acid ....	14, 434	Ethylurea ....	9, 291
„ -hydroberberine ....	17, 256	Ethylurethane ....	9, 276
Ethylia....	9, 56	Eucalyn ....	15, 298
Ethylide of Hydrogen ....	8, 170	Euchlorine ....	2, 304
Ethylic Ether ....	8, 171	Euchroate of Ammonia ....	10, 20
Ethylide of potassium ....	13, 491	„ Baryta ....	10, 20
„ of sodium ....	13, 491	„ Lead ....	10, 20
Ethylidene Bromide ....	13, 451	„ Silver ....	10, 21
„ Chlorethylate ....	13, 454	Euchroic acid ....	10, 18
„ Chloride ....	13, 452	Euchroite ....	5, 473
„ Oxychloride ....	13, 453	Euchrone ....	10, 19
Ethyl-irisine ....	13, 255	Euclease....	3, 425
Ethyl-lepidine ....	14, 121	Eudialite ....	3, 464
Ethyl-mannitan ....	15, 374	„ earths contained in ....	3, 349
Ethyl-mercuric Nitrate ....	8, 477	Eudiometry ....	2, 403
Ethyl-meconate of Baryta ....	12, 431	Eugenate of Ammonia ....	14, 204
„ Silver ....	12, 432	„ Anisyl ....	14, 213
Ethyl-meconic acid ....	12, 431	„ Baryta ....	14, 205
„ acid, Meconate of ....	12, 432	„ Benzoyl ....	14, 211
Ethyl-methyl, Stannic ....	13, 509	„ Copper ....	14, 206
Ethyl-methylconine ....	13, 173	„ Cumyl ....	14, 213
Ethyl-methylic Carbonate ....	8, 393	„ Ethyl ....	14, 211
Ethyl-morphine ....	16, 439	„ Iron ....	14, 206
Ethyl-mucic acid ....	11, 511	„ Lead ....	14, 206
Ethyl-naphthylamine ....	14, 120	„ Lime ....	14, 206
„ -nicotine ....	14, 236	„ Magnesia ....	14, 206
Ethyl-nitraniline ....	11, 309	„ Potash ....	14, 205
Ethyl-nitrosalicylic acid ....	12, 312	„ Quinine ....	17, 617
Ethyl-chloride of Platinum ....	8, 388	„ Soda ....	14, 205
Ethyl-cenanthylic Ether ....	13, 199	„ Strontia ....	14, 206
Ethyl-oxamic acid ....	9, 262	„ Toluyll ....	14, 212
Ethyl-oxamide ....	9, 266	Eugenates, metallic ....	14, 202
Ethyl-phloretic acid ....	13, 314	Eugenethyl ....	14, 211
Ethyl-phosphoric acid 8, 399; 13, 456		<i>Eugenia caryophyllata</i> , volatile	
Ethyl-phosphorous acid ....	8, 397	oil of ....	14, 209
Ethyl-phthalamine ....	13, 21	Eugenic acid ....	14, 201
Ethyl-phthalidine ....	13, 35	„ acid, volatile oils con-	
Ethyl-picoline ....	11, 272	taining ....	14, 209
Ethyl-piperidine ....	10, 451	Eugenin ....	14, 200
Ethyl-piperidine urea ....	15, 17	Eugenol ....	14, 202
Ethyl-pteritannic acid ....	15, 503	<i>Euglena viridis</i> , preparation of	
Ethyl-pyridine ....	10, 408	paramylene from ....	15, 122
Ethyl-quinidine ....	17, 310	Eukairite ....	7, 197
„ -quinine ....	17, 308	Eukalyn ....	15, 298
„ -salicyl, Benzoate of ....	12, 260	Euodic or Enodic Aldehyde ....	14, 530
Ethyl-salicylamic acid ....	12, 323	<i>Euonymus europæus</i> , colouring	
Ethyl-salicylic acid ....	12, 259	matter of ....	16, 520
Ethyl-sparteine ....	16, 282	„ <i>europæus</i> , oil from	
Ethyl-stannethyl ....	9, 104	the seeds of ....	17, 98
Ethyl-strychnine ....	17, 510	Euosmite ....	17, 436
Ethyl-sulphates, <i>see</i> Sulphovinates.		Eupatorine ....	18, 195
Ethyl-sulphites ....	8, 408	<i>Euphorbia cyparissias</i> , resins	
Ethyl-sulphobenzoic acid ....	12, 63	of ....	17, 415
Ethyl-sulphuric acid ....	8, 415	„ <i>lathyrus</i> , oil from	
Ethyl-sulphurous acid ....	8, 408	the seeds of ....	17, 96
Ethyl-tannaspidic acid....	15, 499	Euphorbic acid ( <i>malic acid</i> ) ....	10, 207
Ethyl-toluidine....	12, 340	Euphorbium ....	17, 415
Ethyl-triphenylammonium ....	11, 336	Euphrasiatannic acid ....	15, 518
Ethyl-trithionic acid ....	12, 513	Eupione ....	15, 152

Euxanthates ....	17, 533	Expansion of bodies in passing	
Euxanthic acid 15, 343 ;	17, 530	from the liquid or	
„ acid, preparation of		solid to the gaseous	
styphnic acid from....	11, 230	state ....	1, 258
Euxanthone ....	17, 181	„ and equivalent vo-	
„ preparation of		lume, supposed re-	
styphnic acid		lation between ....	1, 233
from ....	11, 230	„ of gases and vapours	
Euxenite ....	4, 13	by heat ....	1, 224
Evaporating receiver (Bons-		„ influence of, on com-	
dorff's) ....	1, 289	bination ....	1, 37
Evaporation ....	1, 271	„ of liquids by heat ....	1, 225
„ amorphous bodies		„ solids by heat ....	1, 232
produced by ....	1, 103	Explosion resulting from decom-	
„ cold produced by	1, 274	position ....	1, 134
Even numbers of atoms, law of	7, 6	Explosive starch ....	15, 106
Evernic acid ....	16, 443	External form of crystals ....	1, 15
Everninate of Ethyl ....	16, 446	Extract of Lead ....	8, 314
Evernic acid ....	16, 445	Extractive matter, acrid	16, 85, 91
Evernitic acid ....	16, 447	„ „ colourless ....	16, 513
Excretin ....	18, 245	<i>Extractum Saturni</i> ....	8, 314
Exosmose ....	1, 28	Eye, black pigment of ....	18, 417

## F.

<i>Fabæ Pichurim majores</i> , fat of	16, 398	Faraday's Voltameter ....	1, 435
Fæces, excretin obtained from....	18, 246	Fat of Bay or Laurel ....	16, 393
Fagine ....	18, 195	„ Bichuyba ....	16, 396
<i>Fagus sylvatica</i> , oil from the		„ Blood ....	16, 486
kernels of ....	17, 94	„ <i>Brindonia indica</i> ....	16, 387
Fahl-ore ....	5, 492	„ Calf ....	16, 388
Fahlunite ....	3, 435	„ Camel ....	16, 388
Fahrenheit into Centigrade de-		„ Cantharides ....	16, 388
grees, table for con-		„ Cocculus grains ....	16, 389
verting ....	2, 500	„ Cochineal ....	16, 389
„ Reaumur and Centi-		„ Cocoa ....	16, 389
grade scales, com-		„ Coffee ....	16, 390
parative table of ....	1, 237	„ crystalline from oil of	
False decomposition ....	1, 113	mustard ....	17, 552
„ precipitation ....	1, 113	„ of <i>Cyclicodaphne sebifera</i>	16, 390
Faraday's Battery ....	1, 424	„ Deer ....	16, 390
„ Dielectrics ....	1, 312	„ Dika-bread ....	16, 391
„ discovery of the		„ Dog ....	16, 391
production of cir-		„ Elephant ....	16, 391
cular polarisation		„ <i>Fabæ Pichurim majores</i>	16, 398
by magnetic or		„ Fox ....	16, 391
electric dynamic		„ Goat ....	16, 391
force ....	1, 168	„ Goose ....	16, 391
„ experiments on elec-		„ Hare ....	16, 391
tricity developed		„ Hog ....	16, 391
in the escape of		„ Horse ....	16, 391
steam through		„ Human ....	16, 392
pipes ....	1, 338	„ of Jaguar....	16, 392
„ method of liquefying		„ Maize-seed ....	16, 393
gases ....	1, 286	„ Mutton....	16, 394
„ researches on the		„ Ox ....	16, 397
relations of light		„ Pheasant ....	16, 398
to magnetism ....	1, 168	„ <i>Pistacia Lentiscus</i>	16, 398

- |                                                                                     |         |                                                   |                 |
|-------------------------------------------------------------------------------------|---------|---------------------------------------------------|-----------------|
| Fat of Potatoes ....                                                                | 16, 398 | gelatin com-<br>pounds, preven-<br>tion of ....   | 7, 99           |
| „ Sheep ....                                                                        | 16, 394 | Fermentation, references to me-<br>moirs relating | 18, 462         |
| „ (or wax) of Shellac ....                                                          | 16, 399 | „ of sugar, various                               | 7, 98           |
| „ of Turtle ....                                                                    | 16, 400 | „ theories of ....                                | 7, 109          |
| Fats, mixtures of, with volatile                                                    |         | „ liquors, occurrence                             | 13, 566         |
| oils ....                                                                           | 7, 169  | of glycerin in ....                               | 13, 566         |
| „ phosphoretted ....                                                                | 16, 483 | Ferment-oil of <i>Achillea Mille-</i>             |                 |
| „ of Plant-lice ....                                                                | 16, 398 | <i>folium</i> ....                                | 14, 406         |
| „ preparation of oleic acid                                                         |         | „ <i>Chelidonium ma-</i>                          |                 |
| from ....                                                                           | 17, 63  | <i>jus</i> ....                                   | 14, 405         |
| „ saponifiable, yielding gly-<br>cerin ....                                         | 7, 227  | „ <i>Choerophyllum</i>                            |                 |
| „ simple and mixed, saponi-<br>fication of ....                                     | 7, 233  | <i>sylvestre</i> ....                             | 14, 405         |
| „ solid, natural ....                                                               | 16, 385 | „ <i>Conium maccala-</i>                          |                 |
| „ unsaponifiable ....                                                               | 7, 229  | <i>tum</i> ....                                   | 14, 405         |
| „ from various species of                                                           |         | „ diseased apples                                 |                 |
| <i>Bassia</i> ....                                                                  | 16, 385 | „ ( <i>Maloil</i> ) ....                          | 14, 408         |
| „ of various species of <i>My-</i><br><i>ristica</i> ....                           | 16, 395 | „ <i>Echium vulgare</i> ....                      | 14, 405         |
| „ Wool ....                                                                         | 16, 400 | „ <i>Erica vulgaris</i> ....                      | 14, 406         |
| Fatty Acids ....                                                                    | 7, 229  | „ <i>Erythraea Cen-</i>                           |                 |
| „ from <i>Digitalis</i> ....                                                        | 16, 341 | <i>taurium</i> ....                               | 14, 405         |
| „ separation of ....                                                                | 16, 210 | „ <i>Marrubium vul-</i>                           |                 |
| „ solid, separation of ....                                                         | 15, 46  | <i>gare</i> ....                                  | 14, 406         |
| „ matters, preparation of                                                           |         | „ <i>Quercus Robur</i> ....                       | 14, 406         |
| succinic acid by oxida-<br>tion of....                                              | 10, 112 | „ <i>Salix pentandra</i> ....                     | 14, 407         |
| „ oil of black mustard ....                                                         | 17, 553 | „ <i>Salvia pratensis</i> ....                    | 14, 407         |
| „ oil of spruce fir ....                                                            | 16, 316 | „ various species of                              |                 |
| „ „ white mustard ....                                                              | 17, 553 | <i>Plantago</i> ....                              | 14, 406         |
| „ oils occurring in nature                                                          | 17, 89  | „ <i>Tussilago far-</i>                           |                 |
| Favre and Silbermann's de-<br>terminations of the specific<br>heats of liquids .... | 1, 248  | <i>fara</i> ....                                  | 14, 406         |
| Fayalite ....                                                                       | 5, 278  | „ <i>Trifolium fibri-</i>                         |                 |
| Feather-ore ....                                                                    | 5, 176  | <i>num</i> ....                                   | 14, 407         |
| „ -salt ....                                                                        | 5, 276  | „ <i>Urtica urens</i> ....                        | 14, 407         |
| Feathers, action of hot water                                                       |         | „ <i>Vitis vinifera</i> ....                      | 14, 407         |
| on....                                                                              | 18, 349 | Ferments ....                                     | 7, 98           |
| „ colouring matter of ....                                                          | 18, 419 | Fern-root, resin of ....                          | 17, 449         |
| „ composition of ....                                                               | 18, 348 | Ferrate of Baryta ....                            | 5, 273          |
| <i>Fécule</i> ....                                                                  | 15, 76  | „ Potash ....                                     | 5, 265          |
| „ <i>soluble</i> ....                                                               | 15, 94  | Ferric Acetate ...                                | 8, 320; 13, 446 |
| Felspar ....                                                                        | 3, 441  | „ Acid ....                                       | 5, 201          |
| „ artificial ....                                                                   | 3, 442  | „ Ammonio-azophosphate....                        | 5, 261          |
| Fennel oil ....                                                                     | 14, 196 | „ Anacardate ....                                 | 17, 522         |
| Fergusonite ....                                                                    | 4, 11   | „ Apocrenate ....                                 | 17, 470         |
| Ferment of urine ....                                                               | 18, 413 | „ Arseniate ....                                  | 5, 307          |
| Fermentable substances ....                                                         | 7, 98   | „ Arsenio-sulphate ....                           | 5, 308          |
| Fermentation, alcoholic or vinous                                                   | 15, 265 | „ Arsenite....                                    | 5, 304          |
| „ attributed to action                                                              |         | „ Aspartate ....                                  | 10, 237         |
| of fungi ....                                                                       | 7, 110  | „ Azophosphate ....                               | 5, 259          |
| „ butyric ....                                                                      | 10, 81  | „ Benzoate ....                                   | 12, 42          |
| „ electricity in ....                                                               | 1, 341  | „ Benzoglycolate ....                             | 12, 68          |
| „ lactous 11, 473; 15, 276                                                          |         | „ Borate ....                                     | 5, 222          |
| „ nature and condi-<br>tions of ....                                                | 7, 96   | „ Bromate ....                                    | 5, 251          |
| „ of protein and                                                                    |         | „ Bromide ....                                    | 5, 250          |
|                                                                                     |         | „ Cacodylate ....                                 | 9, 330          |
|                                                                                     |         | „ Carbonate ? ....                                | 5, 222          |



Ferric Chelidonate ....	12, 420	Ferric Salts ....	5, 198
„ Chloride....	5, 253	„ Salts, red colour pro-	
„ „ hydrocyanate of	8, 149	duced in, by Meconic	
„ Chromate ....	5, 299	acid ....	12, 429
„ Chrysammate ....	12, 6	„ Sebate ....	14, 498
„ Citrate ....	11, 457	„ Selenite ....	5, 247
„ Comenate ....	11, 387	„ Silicate ....	5, 281
„ Crenate ....	17, 468	„ Suberate ....	13, 211
„ Croconate ....	10, 393	„ Succinate ....	10, 126
„ Cyanide ....	7, 448	„ Sucrate, colloidal	15, 539
„ Ferrocyanide ....	7, 437	„ Sulpharseniate ....	5, 309
„ Formiate ....	7, 280	„ Sulpharsenite ....	5, 309
„ Fumarate ....	10, 29	„ Sulphate ....	5, 241
„ Hippurate ....	12, 80	„ Sulphide ....	5, 231
„ Hydrate....	5, 196	„ Sulphite ....	5, 236
„ Hydrate, modification of,		„ Sulphocarbonate 5, 246 ;	5, 236
precipitated from solu-		„ Sulphocyanide .... 8, 88 ;	12, 500
tion of ferric acetate by		„ Sulphomolybdate ....	5, 298
boiling....	10, 512	„ Sulphotellurate ....	5, 312
„ Hydrobromate ....	5, 251	„ Sulphotungstate ....	5, 297
„ Hydrochlorate, basic	5, 255	„ Tannate ....	16, 469
„ Hydrofluuate, basic	5, 257	„ Tantalate ....	5, 292
„ Hydrosulphate ....	5, 232	„ Tartrate ....	10, 314
„ Hypophosphate ....	5, 223	„ Tellurate ....	5, 312
„ Hypophosphite ....	5, 223	„ Tellurite ....	5, 312
„ Hyposulphate ....	5, 237	„ Terhydrochlorate	5, 254
„ Iodate ....	5, 249	„ Terhydrocyanate	7, 449
„ Iodide ....	5, 247	„ Terhydrofluuate ....	5, 256
„ Itaconate ....	10, 427	„ Tersilicate ....	5, 282
„ Kinate ....	16, 231	„ Titanate ....	5, 292
„ Lactate ....	11, 492	„ Valerate....	11, 35
„ Malate ....	10, 224	„ Vanadate ....	5, 298
„ Maleate ....	8, 158	Ferrico-aluminic Sulphite	5, 277
„ Mellitate ....	10, 9	„ -ammonic Carbonate	5, 260
„ Metaphosphate ....	5, 227	„ -ammonic Chloride]	5, 263
„ Molybdate ....	5, 297	„ -ammonic Sulphate	5, 269
„ Nitrate ....	5, 258	„ -calcic Arseniate	5, 309
„ Nitrobenzoate ....	12, 126	„ -calcic Hyposulphite	5, 274
„ Nitrohippurate ....	12, 131	„ -manganic Phosphate	5, 303
„ Oxalate ....	9, 157	„ -potassic Carbonate	5, 268
„ Oxide ...	5, 194	„ -potassic Chloride	5, 271
„ Oxide with Chromic		„ -potassic Fluoride	5, 271
oxide ....	5, 299	„ -potassic Sulphate	5, 268
„ Oxide, reactions of, with		„ -sodic Carbonate....	5, 272
Organic acids ....	7, 210	„ -sodic Pyrophosphate	5, 272
„ Oxide with Zinc-oxide	5, 313	„ -sodic Sulphate ....	5, 273
„ Oxybromide ...	5, 251	Ferricyanide of Ammonium	7, 450 ; 7, 452
„ Oxychloride ....	5, 255	„ Barium and Po-	
„ Oxyfluoride ....	5, 257	tassium ....	7, 481
„ Periodate ....	5, 250	„ Calcium ....	7, 483
„ Persulphomolybdate	5, 298	„ Cobalt ...	7, 497
„ Phosphate ....	5, 225	„ Cupric....	7, 8
„ Phosphite ....	5, 223	„ Cuprous ....	8, 8
„ Phosphosulphate	5, 246	„ of Ethyl ?	9, 354
„ Pyromeconate ....	10, 442	„ Ferrous (Prussian	
„ Pyromucate ....	10, 385	blue, A) ....	7, 435
„ Pyrophosphate ....	5, 227	„ of Iron and Potas-	
„ Pyrotartrate ....	11, 96	sium ....	7, 477
„ Racemate ....	10, 358		

Ferricyanide of Lead ....	7, 491	Ferrocyanide of Potassium with	
„ Magnesium ....	7, 485	Cyanide of Mer-	
„ Manganese ....	7, 488	cury ....	8, 25
„ Nickel....	7, 500	„ Potassium, de-	
„ Potassium		composition of,	
7, 468 ; 13, 408		by sulphuric	
„ Potassium and		acid ....	12, 495
Silver ....	8, 32	„ Potassium, for-	
„ Sodium ....	7, 479	mation of ....	7, 453
„ Sodium ....	7, 478	„ Potassium, green	7, 468
„ Zinc ....	7, 490	„ Potassium, pre-	
Ferricyanides, solubility of, in		paration of, on	
alcohol ....	8, 273	the large scale	7, 453
Ferridecyanides, <i>see</i> Ferricyanides.		„ Potassium, pre-	
Ferriprussic Acid ....	7, 449	paration of, on	
Ferrite of Ammonia ? ....	5, 260	the small scale	7, 457
„ Nickel ....	5, 396	„ Silver ....	8, 31
„ Potash ....	5, 265	„ Sodium ....	7, 478
„ Soda....	5, 271	„ Strontium ....	7, 482
Ferrocyanide of Aluminium		„ Tantalum ....	7, 487
7, 486 ; 13, 408		„ Thorium ....	7, 486
„ Barium ....	7, 480	„ Titanium ....	7, 486
„ Barium and Po-		„ Yttrium ....	7, 486
tassium ....	7, 481	„ Zinc ....	7, 489
„ Calcium ....	7, 482	„ Zinc, with Am-	
„ Calcium and		monia ....	7, 490
Potassium ....	7, 484	Ferrocyanides ....	7, 432
„ Cerium ....	7, 486	„ double ....	10, 503
„ Cobalt....	7, 496	„ metallic, electro-	
„ Copper and		lysis of ....	1, 456
Potassium ....	7, 10	„ solubility of, in	
„ Cupric ....	8, 8	alcohol ....	8, 273
„ Cuprous ....	8, 8	Ferroprussiate of Potash	7, 453
„ Ethylic ....	9, 353	Ferroprussiates....	7, 432
„ Ferric ....	7, 437	Ferroprussic acid	7, 429
„ of Glucinum ....	7, 486	„ red ....	7, 449
„ Iron and Potas-		Ferroso-aluminic Sulphate	5, 276
sium ....	7, 474	„ -ammonic Carbonate	5, 260
„ Lead ....	7, 490	„ „ Chloride	5, 263
„ Magnesium ....	7, 484	„ „ Phosphate	5, 260
„ Magnesium and		„ „ Sulphate	5, 261
Ammonium ....	7, 485	„ -cupric Sulphate	5, 492
„ Magnesium and		„ -ferric Acetate, use of, for	
Potassium ....	7, 486	steeping wood	7, 113
„ Manganese ....	7, 488	„ „ Arseniate	5, 306
„ Manganese and		„ „ Oxide ....	5, 190
Potassium ....	7, 488	„ „ Pyrogallate	11, 402
„ Nickel....	7, 499	„ „ Salts ....	5, 194
„ Potassio-cupric	12, 498	„ „ Tartrate ....	10, 315
„ Potassio-cuprous....	12, 497	„ -ferrico-magnesian Sul-	
„ of Potassium and		phate ....	5, 274
Ammonium ....	10, 503	„ -magnesian Carbonate	5, 274
12, 496		„ -manganous Phosphate....	5, 301
„ Potassium, com-		„ -niccolic Sulphate	5, 397
binations of ....	7, 467	„ -potassic Chloride	5, 271
„ Potassium, de-		„ „ Fluoride	5, 271
compositions of	7, 457	„ „ Sulphate	5, 268
„ Potassium, crys-		„ -sesquicyanide of Potas-	
tallised ....	7, 467	sium ....	7, 468

Ferroso-sodic Pyrophosphate ....	5, 272	Ferrous Selenite ....	5, 247
„ -zincic Sulphate ....	5, 314	„ Silicate ....	5, 278
„ -zinco-ammonic Sulphate ....	5, 314	„ Suberate ....	13, 211
Ferrous Acetate ....	8, 320	„ Succinate ....	10, 126
„ Aluminate ....	5, 275	„ Sulphantimoniate ....	5, 311
„ Antimoniate ....	5, 310	„ Sulphantimonite ....	5, 311
„ Antimonite ....	5, 310	„ Sulpharseniate....	5, 309
„ Apocrenate ....	17, 470	„ Sulpharsenite ....	5, 309
„ Arseniate ....	5, 305	„ Sulphate ....	5, 237
„ Arsenite ....	5, 304	„ Sulphate, Electrolysis of	1, 463
„ Benzoates ....	12, 42	„ Sulphide ....	5, 228
„ Bitungstate ....	5, 296	„ Sulphite ....	5, 236
„ Borate....	5, 222	„ Sulphocarbonate ....	5, 245
„ Bromide ....	5, 250	„ Sulphocyanide ....	12, 499
„ Carbonate ....	5, 219	„ Sulphocyanides ....	8, 88
„ Chelidonate ....	12, 420	„ Sulphomolybdate ....	5, 297
„ Chloride ....	5, 251	„ Sulphophosphite ....	5, 246
„ Chloroplatinate ....	6, 337	„ Sulphotellurite ....	5, 312
„ Chrysammate ....	12, 6	„ Sulphotungstate ....	5, 297
„ Citrate ....	11, 457	„ Tannate ....	15, 469
„ Crenate ....	17, 468	„ Tantalite ....	5, 292
„ Croconate ....	10, 393	„ Tartrate ....	10, 313
„ Cyanate ....	8, 68	„ Tellurate ....	5, 312
„ Cyanide ....	7, 432	„ Tellurite ....	5, 312
„ and Ferric Cyanides, hy-		„ Titanate ....	5, 289
drated compounds of....	7, 434	„ Tungstate ....	5, 294
„ Ferricyanide ....	7, 435	„ Valerate ....	11, 35
„ Formiate ....	7, 280	„ Vanadate? ....	5, 298
„ Hydrate ....	5, 187	Ferruginous Epidote ....	3, 430
„ Hydriodate ....	5, 248	„ Zinc-spar ....	5, 16
„ Hydrobromate ....	5, 250	<i>Ferula Asafœtida</i> , resin of	17, 398
„ Hydrochlorate ....	5, 252	<i>Ferrum</i> ....	5, 182
„ Hydrofluatc ....	5, 256	Ferruretted Hydrogen Gas?	5, 201
„ Hydrosulphate ....	5, 230	<i>Ferula Opoponax</i> , resin of	17, 427
„ Hyposulphate ....	5, 236	„ <i>Persica</i> , resin of	17, 428
„ Hyposulphite ....	5, 235	Feuillin ....	18, 225
„ Hyposulphophosphite....	5, 246	Feverfew oil ....	14, 369
„ Iodate? ....	5, 249	Fibin, alleged formation of, from	
„ Iodide....	5, 247	defibrinated blood-serum by	
„ Iodoplatinate ....	6, 337	contact with oxygen, or by	
„ Lactate ....	11, 490	electrolysis ....	18, 323
„ Mellitate ....	10, 9	Fibrin, combination of, with tan-	
„ Mucate ....	11, 508	nic acid ....	18, 330
„ Niccolate ....	5, 396	„ composition of ....	18, 324
„ Nitrate ....	5, 257	„ constitution of, according	
„ Oxalate ....	9, 156; 13, 526	to Bouchardat ....	18, 323
„ Oxide ....	5, 187	„ dissolved in dilute hydro-	
„ Oxide with Chromic		chloric acid, action of	
Oxide ....	5, 298	yeast upon ....	18, 327
„ Perchlorate ....	5, 256	„ of gluten ....	18, 441
„ Periodate ....	5, 250	„ insolubility of, in alcohol	18, 330
„ Persulphomolybdate ....	5, 298	„ of maize ....	18, 441
„ Phosphate ....	5, 224	„ modified ....	18, 321
„ Phosphite ....	5, 223	„ occurrence of, in blood ....	18, 319
„ Pyromucate ....	10, 385	„ oxidation of ....	18, 324
„ Pyrophosphate ....	5, 225	„ preparation and pro-	
„ Pyrotartrate ....	11, 95	perties of ....	18, 323
„ Racemate ....	10, 357	„ putrefaction of ....	18, 327
„ Salts, general properties of	5, 188	„ pure ....	18, 321



- Fibrin, reaction of, with acetic acid .... 18, 326  
 „ reaction of, with ammonia .... 18, 327  
 „ reaction of, with chlorine-water .... 18, 325  
 „ reaction of, with citric acid .... 18, 327  
 „ reaction of, with ferrocyanide of potassium .... 18, 329  
 „ reaction of, with hydrochloric acid .... 18, 326  
 „ reaction of, with nitric acid .... 18, 326  
 „ reaction of, with peroxide of hydrogen .... 18, 325  
 „ reaction of, with platino-cyanide of potassium .... 18, 329  
 „ reaction of, with oil of vitriol .... 18, 325  
 „ reaction of, with potash .... 18, 327  
 „ reaction of, with tartaric acid .... 18, 327  
 „ reactions of, with lead, copper, mercury, and silver salts .... 18, 329  
 „ reactions of, with neutral salts of alkali-metal .... 18, 328  
 „ reactions of, with water .... 18, 325  
 „ soluble .... 18, 320  
 „ vegetable .... 18, 423, 451  
 Fibrinogenous substance .... 18, 319, 322  
 Fibrinoplastic substance .... 18, 271, 319  
 Fibro-cartilage, glutin obtained from .... 18, 353  
 Fibroïn .... 18, 363  
 Fibroferrite .... 5, 243  
 Fibrolite .... 3, 413  
 Fibrose .... 15, 126, 144  
 Fibrous manganese .... 4, 203  
 Ficarin .... 18, 226  
 Fichtelite .... 18, 246  
*Ficus rubiginosa*, occurrence of sycocerylic acetate in the resin of .... 17, 43  
 Figures of Widmanstadt .... 1, 19  
 Filhol's calculations respecting the relations between density and atomic weight .... 1, 39  
 Filicates .... 16, 127  
 Filimelisisulphates .... 15, 27  
 Filipelosic Acid .... 15, 25  
 Filixoleic acid .... 17, 74  
 Fine-leaved Water-drop, oil of .... 14, 404  
 Fire .... 1, 181  
 „ hypothetical principle of .... 1, 167  
 „ -damp .... 7, 249  
 „ -extinguishing substances .... 2, 35  
 „ -syringe .... 1, 301  
 Fish, phosphorescence of putrefying .... 7, 104  
 Fishes, electric .... 1, 429  
 Fish-oils .... 16, 321  
 Fishes, phosphorescence of .... 1, 182  
 Fixed or non-volatile bodies .... 1, 257  
 Flame, brightness or illuminating power of .... 2, 29  
 „ colour of .... 2, 30  
 „ electric conducting power of .... 1, 312  
 „ extinction of .... 2, 33  
 „ of organic bodies, diamagnetic properties of .... 1, 517  
 „ production of .... 2, 28  
 Flavequisetin .... 16, 517  
 Flavindic acid .... 13, 91  
 Flavindin .... 13, 91  
 Flavine .... 12, 166  
 Flax, action of nitric acid on .... 15, 136  
 Fleitmann and Henneberg's phosphates .... 2, 134  
 Fleitmann and Henneberg's phosphates of silver .... 6, 151  
 Flesh, preparation of cratinine from .... 10, 257  
 „ preparation of creatine from .... 10, 250  
 „ preparation of leucine from .... 11, 427  
 Flint .... 3, 352  
 „ -glass .... 3, 380; 5, 166  
*Flores benzoës* .... 12, 32  
 „ *salis ammoniaci martiales* .... 5, 264  
 „ *zinci* .... 5, 5  
 Flower-buds, undeveloped, green colouring matter of .... 17, 7  
 Flowers, alteration of colour of, by exposure to light .... 1, 170, 171  
 „ of benzoïn .... 12, 32  
 „ blue colours of .... 16, 522  
 „ effect of sunshine on the colours of .... 7, 95  
 „ of lead .... 5, 108  
 „ résin of .... 16, 513  
 „ of sulphur .... 2, 156  
 „ violet colouring matter of .... 16, 523  
 „ yellow of .... 16, 513  
 „ yellow, sudden emission of light by .... 1, 187  
 „ of zinc .... 5, 5  
 Fluavil .... 17, 343  
 Fluids formed by combination of heat with ponderable bodies .... 1, 252  
 Fluoborate of Ammonia .... 2, 489  
 Fluoboric acid .... 2, 363  
 „ ether .... 8, 171

Fluoboric gas ....	2, 362	Fluoride of Chromium....	4, 137
Fluoboride of Calcium ....	3, 213	„ Cobalt ....	5, 337
„ Potassium ....	3, 65	„ Cobalt and Ammo-	
„ Sodium ....	3, 116	„ nium ....	5, 342
„ Yttrium ....	3, 290	„ Cobalt and Potas-	
Fluopalladite of Potassium ....	6, 354	„ sium ....	5, 344
„ Sodium ....	6, 355	„ Copper ....	5, 442
Fluoplatinate of Ammonium ....	6, 310	„ Copper and Potas-	
„ Potassium ....	6, 323	„ sium ....	5, 461
„ Sodium ....	6, 326	„ Ethyl ? ....	8, 382
Fluorapatite ....	3, 219	„ Ferrico-potassic ....	5, 271
Fluoric acid, <i>see</i> Hydrofluoric		„ Ferroso-potassic ....	5, 271
acid ....	2, 360	„ of Glucinum ....	3, 300
Fluoride of Aluminum....	3, 317	„ Glucinum and Po-	
„ Aluminum with Alu-		„ tassium ....	3, 302
„ mina ....	3, 317	„ Hydrogen ....	2, 260
„ Aluminum and Cop-		„ Hydrogen and Po-	
„ per ....	5, 464	„ tassium ....	3, 65
„ Aluminum with Hy-		„ Hydrogen and So-	
„ drofluat of Am-		„ dium ....	3, 116
„ monia ....	3, 320	„ Iron ....	5, 256
„ Aluminum and Li-		„ Lead ....	5, 151
„ thium ....	3, 327	„ Lead with Lead	
„ Aluminum and Nick-		„ nitrate ....	5, 158
„ el ....	5, 386	„ Lithium ....	3, 131
„ Aluminum and Po-		„ Lithium and Boron	3, 131
„ tassium ....	3, 324	„ Lithium and Hydro-	
„ Aluminum and So-		„ gen ....	3, 131
„ dium ....	3, 326	„ Magnesium ....	3, 243
„ Aluminum and Zinc	5, 46	„ Magnesium with Si-	
„ Ammonium ....	2, 488	„ licate of Magnesia	3, 401
„ Antimony ....	4, 371	„ of Manganese ....	4, 230
„ Arsenic ....	4, 286	„ Manganese and Po-	
„ Barium ....	3, 161	„ tassium ....	4, 238
„ Barium with Chlo-		„ Manganese and So-	
„ ride of Barium ....	3, 166	„ dium ....	4, 240
„ Bismuth ....	4, 440	„ Mercuric ....	6, 66
„ Boron ....	2, 362	„ Mercurous ....	6, 65
„ Boron, solubility of,		„ of Methyl ....	7, 290
„ in alcohol ....	8, 265	„ Nickel ....	5, 379
„ Boron, sulphate of	2, 364	„ Nickel and Ammo-	
„ Cacodyl ....	9, 348	„ nium ....	5, 384
„ Cadmium ....	5, 61	„ Nickel and Potas-	
„ Calcium ....	3, 212	„ sium ....	5, 385
„ Calcium, action of		„ Phosphorus ....	2, 364
„ oxalic acid on ....	13, 515	„ Platinum ....	6, 296
„ Calcium with Cupric		„ Potassium ....	3, 64
„ Sulphate ....	5, 463	„ Potassium with Ses-	
„ Calcium with Sul-		„ quifluoride of Chro-	
„ phate of Baryta		„ mium ....	4, 151
„ and Chloride of		„ Selenium ....	2, 365
„ Barium ....	3, 219	„ Silicium ....	3, 362
„ Calcium with Sul-		„ Silicium, absorption	
„ phate of Lime ....	3, 220	„ of, by liquid vola-	
„ Calcium with Sul-		„ tile oils ....	7, 167
„ phide of Barium ....	3, 218	„ Silicium, solubility	
„ Calcium with Sul-		„ of, in alcohol ....	8, 269
„ phide of Calcium....	3, 220	„ Silicium and Ammo-	
„ Cerium ....	3, 271	„ nium ....	3, 268

Fluoride of Silicium and Barium	3, 387	Fluoride of Titanium and Mag-	
„ Silicium and Cal-		nesium ....	3, 487
„ cium ....	3, 393	„ Titanium and Potas-	
„ Silicium and Chro-		sium ....	3, 485
„ mium ....	4, 156	„ Titanium and So-	
„ Silicium with Si-		dium ....	3, 486
„ licate of Alu-		„ Tungsten ....	4, 37
„ mina ....	3, 419	„ Tungsten and Am-	
„ Silicium and Gluci-		monium ....	4, 38
„ num ....	3, 410	„ Tungsten and Potas-	
„ Silicium and Li-		sium with Tungs-	
„ thium ....	3, 387	tate of Potash ....	4, 46
„ Silicium and Magne-		„ Tungsten and So-	
„ sium ...	3, 400	dium with Tungs-	
„ Silicium with Nitric		tate of Soda ....	4, 47
„ Oxide, &c. ....	3, 368	„ Uranium ....	4, 182
„ Silicium and Potas-		„ Vanadium and Po-	
„ sium ....	3, 374	tassium ....	4, 100
„ Silicium and Silver	6, 182	„ Vanadium and So-	
„ Silicium and So-		dium ....	4, 101
„ dium ....	3, 386	„ Yttrium ....	3, 289
„ Silicium and Stron-		„ Yttrium and Potas-	
„ tium ....	3, 388	sium ...	3, 290
„ Silicium and Ytt-		„ Zinc ...	5, 33
„ rium ....	3, 410	„ Zinc and Potas-	
„ Silicium and Zirco-		sium ....	5, 44
„ nium ....	3, 463	„ Zirconium....	3, 346
„ Silver ....	6, 168	„ Zirconium and Po-	
„ Sodium ....	3, 115	tassium ....	3, 348
„ Sodium, luminous		Fluorides, compounds of, with	
„ appearance accom-		double silicates ...	3, 461
„ panying the crys-		„ metallic ....	2, 365
„ tallisation of ....	1, 208	„ of metals and hy-	
„ Sodium with Sesqui-		drogen ....	2, 366
„ fluoride of Chro-		Fluorine ....	2, 358
„ mium ....	4, 152	„ compounds of, with	
„ Sodium with Silica	3, 387	nuclei ....	7, 212
„ Strontium....	3, 179	„ -salts ....	2, 367
„ Sulphur ....	2, 364	Fluor-spar ....	3, 212
„ Tantalum ....	4, 8	„ with Sulphate of	
„ Tantalum and Am-		Lead ....	5, 164
„ monium ....	4, 9	„ with Sulphate of	
„ Tantalum and Lead	5, 166	Strontia ....	3, 219
„ Tantalum and Po-		Fluosilicic alcohol, reaction of	
„ tassium ....	4, 10	with Quinine ....	17, 284
„ Tantalum and So-		Fluotellurate of Sodium	4, 422
„ dium ....	4, 11	Flux, Baume's quick ...	3, 69
„ Tellurethyl ....	8, 387	„ black ....	3, 20
„ Tellurium ....	4, 413	„ white ....	3, 20
„ Thorinum....	3, 335	<i>Fluxus albus</i> ....	3, 20
„ Thorinum and Po-		„ <i>niger</i> ....	3, 20
„ tassium ....	3, 336	Fly-poison ....	4, 249
„ Tin ....	5, 92	Foliated Earth of Tartar	8, 297
„ Titanium ....	3, 482	„ Tellurium ....	6, 245
„ Titanium and Am-		Food, purple colouring matter	
„ monium ....	3, 484	sometimes occurring on mouldy	
„ Titanium and Cal-		articles of ....	18, 421
„ cium ....	3, 487	Force, chemical ....	1, 33
„ Titanium and Lead	5, 166	„ magnetic lines of ....	1, 168



Forced precipitation resulting from decomposition ....	1, 135	Formonetin ....	17, 565
Forces to which all bodies are subject ....	1, 1	Formosal ....	9, 41
Form of atoms, theories respecting ....	1, 146	Formulæ, chemical ....	1, 60
„ crystals, how modified....	1, 112	„ of organic compounds	7, 8
Formanilide ....	11, 300	Formyl-biphenylbiamine ....	13, 400
Formaniline ....	11, 300	„ Chloride of (so called)....	9, 196
Formation of chemical compounds ....	1, 35—111	Formyl, Perchloride ....	7, 342
Formelepidine, <i>see</i> Methyl-lepidine.		„ Perchloride of (so called)	9, 199
Formemylaniline ....	11, 331	Formylia ....	13, 485
Formevinaniline ....	11, 307	Formylnaphthalide? ....	14, 117
Formevinemylaniline ....	11, 332	Fornacite ....	3, 421
Formiate of Ammonia with Cyanide of Mercury ....	8, 26	Fossil Caoutchouc ....	17, 436
„ Amyl ....	11, 66	„ Resins ....	17, 430
„ Bichlorovinic ....	9, 231	Fox-fat ....	16, 391
„ of Butyl ....	10, 108	„ -glove, preparation of Digitalin from ....	16, 331
„ Chinoline ....	13, 252	„ -glove leaves, preparation of Digitaletin from ....	16, 328
„ Chloromethylic ....	7, 309	Frangulin ....	16, 76
„ Chlorovinic ....	9, 229	Frankincense ....	17, 427
„ of Cinchonidine ....	17, 227	Franklinite ....	5, 313
„ Cinchonine ....	17, 216	Fraxetin ....	16, 278
„ Ethyl ....	8, 482	Fraxin ....	15, 343; 16, 279
„ Ethyl, tribasic ....	9, 360	Freezing mixtures ....	1, 297—299
„ Methyl ....	7, 309	„ point ....	1, 253
„ of Morphine ....	16, 433	„ temperature, effect of, in preventing fermentation and putrefaction	7, 100, 116
„ Perchloromethylic ....	9, 235	Freiberg method of amalgamation ....	6, 134
„ Perchlorovinic ....	9, 233	Frémy's Acid Meta-antimoniate of Potash ....	4, 377
„ of Potash with Cyanide of Mercury ....	8, 26	„ Acid Meta-antimoniate of Soda ....	4, 382
„ of Quinine ....	18, 289	„ Chitin ....	15, 415
„ Solanine ....	18, 27	„ Metastannate of Potash	5, 96
„ Stannethyl ....	9, 99	„ Neutral Meta-antimoniate of Potassium....	4, 376
„ Stibmethylethylum	13, 502	„ Ordinary Antimoniate of Ammonia ....	4, 372
Formiates, metallic ....	7, 277	French into English Measures and Weights, tables for converting ....	2, 497
Formic acid ....	7, 268	French method of purifying salt-petre ....	1, 14
„ aqueous ....	7, 276	Friction, electricity produced by	1, 324
„ compound of, with Mannite ....	15, 374	<i>Frondes Thujæ</i> , preparation of Thujin and Thujigenin from ....	16, 242
„ copulated acid produced by, with Bitter Almond Oil	7, 227	Fruit, preparation of Dextro-glucose from various kinds of....	15, 311
„ expansion of, by heat	1, 231	Fruits, Cane-sugar in ....	15, 240
„ preparation of, from oxalic acid ....	12, 478	„ preparation of Cane-sugar from ....	15, 243
„ production of, from Carbonic Oxide ....	10, 490	„ Tannic acid from ....	15, 519
„ relative position of atoms in....	7, 37	„ wax of ....	18, 157
„ solubility of, in alcohol ....	8, 273	„ -sugar ....	15, 305; 16, 335
Formic Ether ....	8, 482	Fuch's soluble glass ....	3, 371
„ Chlorocyanide of? ....	8, 492	„ theory of Amorphism ....	1, 103
Formobenzoic acid ....	12, 57		
Formomethylal....	7, 311		

Fuchsite	....	....	....	3, 450	Fumarate of Magnesia....	....	10, 27
Fucusamide	....	....	....	10, 376	„ Mercuric	....	10, 31
Fucusine	....	....	....	10, 382	„ Mercurous	....	10, 30
Fucosol	....	....	....	10, 373	„ of Nickel	....	10, 30
<i>Fulgora</i> , phosphorescence of	....	....	....	1, 185	„ Potash	....	10, 26
Fulminate of Copper	....	....	....	9, 300	„ Silver	....	10, 31
„ Copper and Ammo-	....	....	....	9, 300	„ Soda	....	10, 26
„ nium	....	....	....	9, 300	„ Strontia	....	10, 27
„ Copper and Potas-	....	....	....	9, 300	„ Zinc	....	10, 28
„ sium	....	....	....	9, 300	Fumaric acid	....	10, 22
„ Mercury	....	....	....	9, 300	„ Anhydride	....	10, 32
„ Silver	....	....	....	9, 303	„ Ether	....	10, 31
„ Silver and Hydro-	....	....	....	9, 309	Fumarine	....	18, 195
„ gen	....	....	....	9, 309	Fume, nature of	....	1, 288
„ Zinc and Ammo-	....	....	....	9, 298	Fumic acid	....	17, 476
„ nium, &c.	....	....	....	9, 298	Fuming spirit of Libavius	....	5, 87
„ Zinc and Hydrogen	....	....	....	9, 297	<i>Fune</i>	....	11, 134
„ Zinc, neutral	....	....	....	9, 297	Fungi, regarded as the prime	....	7, 110
Fulminates, constitution of	....	....	....	12, 551	movers in fermentation	....	7, 110
„ formation of hydro-	....	....	....	7, 390	Fungic acid	....	10, 227
„ cyanic acid, by de-	....	....	....	7, 390	Funidin....	....	11, 338
„ composition of	....	....	....	7, 390	Furnace Calamine	....	5, 10
Fulminating Gold	....	....	....	6, 222	„ slags composed of sili-	....	3, 401
„ Mercury	....	....	....	10, 540	„ cate of magnesia and	....	3, 401
„ Platinum	....	....	....	6, 297	lime	....	3, 401
„ Silver, Berthollet's	....	....	....	6, 172	Furfene....	....	10, 370
„ Silver, double salts	....	....	....	9, 308	Furfuramide	....	10, 376
„ of	....	....	....	9, 308	Furfurine	....	10, 377
„ Zinc, double salts of	....	....	....	9, 298	„ Acetate	....	10, 381
Fulminic acid	....	....	....	9, 295	„ Chloroplatinate	....	10, 381
„ constitution of	....	....	....	12, 551	„ Hydrochlorate	....	10, 380
„ relation of, to Chlo-	....	....	....	12, 553	„ Mellitate	....	10, 382
„ ropicrin and Aceto-	....	....	....	12, 553	„ Metaphosphate ?	....	10, 379
„ nitrile	....	....	....	12, 553	„ Nitrate	....	10, 380
Fulminurate of Ammonia	....	....	....	10, 558	„ Oxalate	....	10, 381
„ Ammonio-cupric	....	....	....	10, 560	„ Perchlorate	....	10, 380
„ of Baryta	....	....	....	10, 560	„ Phosphate	....	10, 378
„ Ethyl	....	....	....	10, 561	„ Pyrophosphate	....	10, 379
„ Lead	....	....	....	10, 560	„ Sulphate	....	10, 380
„ Lime	....	....	....	10, 560	„ Tartrate	....	10, 382
„ Lithia	....	....	....	10, 560	Furfurol	....	10, 370
„ Magnesia	....	....	....	10, 560	Fused bodies, table of Specific	....	1, 255
„ Mercury	....	....	....	10, 561	Heats of (Person)	....	1, 255
„ Potash	....	....	....	10, 558	Fusel-oil	....	11, 9
„ Silver	....	....	....	10, 561	„ Caprylic acid in	....	13, 190
„ Soda	....	....	....	10, 560	„ Fatty acids in	....	13, 387
Fulminuric acid	....	....	....	10, 556	„ preparation of valerianic	....	11, 26
Fumaramide	....	....	....	10, 38	acid from	....	11, 26
Fumarate of Baryta	....	....	....	10, 26	Fusibility of compounds	....	1, 103
„ Cobalt	....	....	....	10, 29	Fusible metal, Rose's	....	5, 180
„ Cupric	....	....	....	10, 30	„ White Precipitate	....	5, 87
„ Ferric	....	....	....	10, 29	Fusion, amorphous bodies pro-	....	1, 103
„ of Lead	....	....	....	10, 28	duced by	....	1, 103
„ Lime	....	....	....	10, 27	„ of salts, aqueous and	....	2, 64
„ Manganese	....	....	....	10, 28	igneous	....	2, 64

## G.

Gadolinite ....	3, 409	Gallic Acid, colours produced in alkaline solutions of, by the action of oxygen ....	12, 401
„ preparation of Yttria from ....	3, 283	„ Acid, reaction of, with Iron salts ....	12, 403
<i>Gadus Morrhua</i> , oil from the liver of ....	16, 323	Gall-nuts, preparation of tannic acid from ....	15, 453
Gaeditates, metallic ....	16, 320	„ -nuts, occurrence of tannic acid in ....	15, 450
Gaedinic acid ....	16, 319	Gallotannic Acid, <i>see</i> Tannic Acid.	
„ ether ....	16, 320	Gallotannin ....	15, 344
<i>Galacticum Bertholletti</i> ....	15, 217	Galls, infusion of, reaction with tellurium salts ....	15, 467
Galactin ....	18, 318	Gallstone of an ox, green pigment from ....	18, 80
<i>Galactodendron utile</i> , resins from the milk of ....	17, 351	„ -stones, preparation of Bili-rubin from ....	18, 71
Galanga, oil ....	14, 369	„ -stones, preparation of Cholesterin from ....	18, 111
„ root, Kaempferide obtained from ....	18, 230	Gallulmic Acid, <i>see</i> Metagallic Acid.	
Galbanum ....	17, 618	Galvani, his electrical discoveries	1, 6
„ blue oil of ....	17, 238	Galvanic batteries ....	1, 410
„ mother-resin of ....	17, 240	„ batteries, conditions which determine the quantity and tension of the current of	1, 413—418
„ resin ....	17, 239	„ batteries, consisting of one metal and two or three liquids ....	1, 428
„ volatile oil of ....	17, 240	„ batteries of one metal and one liquid ....	1, 427
Galena ....	5, 132	„ batteries opposed, effects of ....	1, 484
Gale oil ....	14, 369	„ batteries with two metals and one liquid	1, 424
<i>Galipea officinalis</i> , bitter from the bark of ....	18, 226	„ batteries with two metals and two liquids	1, 421
<i>Galipea officinalis</i> , volatile oil from the bark of ....	14, 357	„ battery, materials of...	1, 419
Galitannic acid....	15, 519	„ battery, movements of mercury in the circuit of ....	1, 486
<i>Galium Mollugo</i> , Aspertannic acid from ....	15, 513	„ battery, polar conductors or wires of ....	1, 431
<i>Galium verum</i> and <i>G. aparine</i> , rubichloric acid in ....	16, 66	„ circuit, Bucholzian ....	1, 397
Gallactic Acid ....	15, 229	„ circuit, effect of partitions or interposed plates in ....	1, 478
Gallamic Acid ....	12, 435	„ circuit, simple, development of heat in the exciting cell of ....	1, 494
Gallate of Alumina ....	12, 408	„ circuit, simple, formed of metals with certain fused substances ....	1, 375
„ Ammonia ....	12, 405	„ circuit, simple, formed of one metal and one liquid ....	1, 384
„ Antimony ....	12, 409		
„ Baryta ....	12, 406		
„ Bismuth ....	12, 409		
„ Cobalt ....	12, 410		
„ Copper ....	12, 410		
„ Iron ....	12, 410		
„ Lead....	12, 410		
„ Lime....	12, 406		
„ Magnesia ....	12, 407, 408		
„ Manganese ..	12, 408		
„ Mercuric ....	12, 411		
„ Mercurous ....	12, 411		
„ of Nickel ....	12, 411		
„ Potash ....	12, 405		
„ Soda ....	12, 405		
„ Stannous ....	12, 409		
„ of Strontia ....	12, 406		
„ Urea ....	13, 456		
„ Zinc ....	12, 409		
Gall-bladder, mucus of ....	18, 345		
Gallic Acid ....	12, 396		



- |                                                                                        |        |                                                                             |         |
|----------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------|---------|
| Galvanic circuit, simple, formed of one metal and two liquids ....                     | 1, 397 | Galvanic circuit, simple, formed of two metals with strong nitric acid .... | 1, 353  |
| „ circuit, simple, formed of three metals and one liquid ....                          | 1, 404 | „ circuit, simple, with two metals and two separated liquids ....           | 2, 403  |
| „ circuit, simple, formed of two liquids and three metals ....                         | 1, 408 | „ circuit, simple, formed of two metals and one liquid ....                 | 1, 341  |
| „ circuit, simple, formed of two metals with aqueous ammonia ....                      | 1, 364 | „ circuit, simple, formed of two metals and three liquids ....              | 1, 396  |
| „ circuit, simple, formed of two metals with aqueous solutions of alkaline salts ....  | 1, 364 | „ circuit, simple, formed of two metals and two liquids ....                | 1, 389  |
| „ circuit, simple, formed of two metals with aqueous solutions of heavy metallic salts | 1, 366 | „ circuit, simple, formed of two metals, with zinc and tin salts ....       | 1, 367  |
| „ circuit, simple, formed of two metals with aqueous potash or soda ....               | 1, 363 | „ circuit, simple, instruments consisting of....                            | 1, 408  |
| „ circuit, simple, formed of two metals with aqueous sulphuret of potassium ....       | 1, 373 | „ circuit, simple, movements of mercury in                                  | 1, 381  |
| „ circuit, simple, formed of two metals with concentrated hydrochloric acid....        | 1, 352 | „ circuits, simple, instruments formed by the union of several ....         | 1, 410  |
| „ circuit, simple, formed of two metals with copper salts ....                         | 1, 367 | „ combinations, various, with three and four metals ....                    | 1, 405  |
| „ circuit, simple, formed of two metals with dilute acids ....                         | 1, 347 | „ decomposition, <i>see</i> Electrolysis.                                   |         |
| „ circuit, simple, formed of two metals with lead salts ....                           | 1, 367 | „ precipitation of a thin layer of one metal on the surface of another      | 1, 497  |
| „ circuit, simple, formed of two metals with mercury salts ....                        | 1, 370 | Galvanism, technical applications                                           | 1, 497  |
| „ circuit, simple, formed of two metals with oil of vitriol ....                       | 1, 352 | „ theories of ....                                                          | 1, 510  |
| „ circuit, simple, formed of two metals and one liquid in two separate vessels ....    | 1, 403 | Galvanometer ...                                                            | 1, 317  |
| „ circuit, simple, formed of two metals and one liquid, which is unequally heated .... | 1, 375 | Gambodic acid....                                                           | 17, 416 |
| „ circuit, simple, formed of two metals with silver salts ....                         | 1, 370 | Gamboge ....                                                                | 17, 416 |
| „ circuit, simple, formed of two metals with                                           |        | „ gum from ....                                                             | 15, 205 |
|                                                                                        |        | Gamma-quinidine ....                                                        | 17, 295 |
|                                                                                        |        | „ -quinine (Hejningen's)                                                    | 17, 273 |
|                                                                                        |        | Garancin, preparation of alizarin from ....                                 | 14, 132 |
|                                                                                        |        | <i>Garcinia Mangostana</i> , resin of                                       | 17, 331 |
|                                                                                        |        | Garden rue, preparation of rutin from ....                                  | 16, 500 |
|                                                                                        |        | <i>Gardenia grandiflora</i> , jelly from from the fruits of ....            | 15, 412 |
|                                                                                        |        | „ <i>grandiflora</i> , preparation of chlororubin from the fruit of ....    | 16, 70  |
|                                                                                        |        | Gardeniatannic acid ....                                                    | 15, 520 |
|                                                                                        |        | Garlic oil ....                                                             | 9, 372  |
|                                                                                        |        | „ and Mustard oils, mixtures of ....                                        | 10, 56  |

Garnet ....	3, 426	Gases, regarded as formed by combination of heat with ponderable bodies	1, 252, 257
Gas, definition of, according to the atomic theory	1, 46	„ relation between the elasticity and density of	1, 257
„ detonating	2, 45	„ relations between the density of compound, and that of their elements	1, 65
„ fluoboric	2, 362	„ relations between the specific gravities and atomic weights of	1, 53, 66
„ laughing	2, 373	„ saturated and unsaturated	1, 258
„ nitrous	2, 377	„ table of tension of	2, 503
„ or Vapour, situation in which its formation takes place	1, 272	„ weight of a litre of various	1, 280
„ -battery, Grove's	1, 428	Gaseous mixtures, theories respecting	1, 21
Gaseity, influence of, on combination	1, 36	Gas-holders	2, 23
Gases, absorption of, by water	2, 65	Gassendi	1, 4
„ calculation of the specific gravity of	1, 280	Gastric juice, solubility of proteides in	18, 263
„ collection and preservation of	2, 23	<i>Gaultheria procumbens</i> , methylosalicylic acid in	12, 255
„ compound, table of the atomic numbers, atomic weights, combining volumes, formulæ, and specific gravities of	1, 66	Gaultheria oil, preparation of salicylic acid from	12, 247
„ condensable, maximum tensions of, at different temperatures	1, 260; 2, 503	Gaultheria	18, 226
„ development of light in, by compression	1, 205	Gaultherylene	14, 290
„ diffusion of	1, 20	Gay-Lussac's Alcoholometer	1, 11
„ effect of various, in hindering or stopping the action of platinum and other metals, on a mixture of hydrogen and oxygen	2, 53	„ formula for calculating the degree of cold produced by evaporation	1, 276
„ elasticity or tension of	1, 257	„ law of volumes	1, 6
„ expansion of, by heat	1, 224	Gay-Lussite	3, 216
„ heat-conducting powers of	1, 223	Geber	1, 3
„ inorganic, table of specific gravities of	1, 279, 280	Gedrite	5, 285
„ liquefaction and solidification of	1, 285	Gehlenite	3, 425
„ liquefaction or solidification of, produced by the affinity of ponderable bodies for the ponderable base of the gas	1, 289	Gelatin	15, 344
„ magnetic and diamagnetic conditions of	1, 516	„ animal	18, 353
„ monatomic, diatomic, and hexatomic	1, 53	„ of bones	18, 353
„ organic, calculation of the specific gravity of	7, 53	„ cartilage	18, 359
„ oxidation of, by platinum black	6, 280	„ coloration of blowpipe flame by	18, 257
„ produced by destructive distillation	7, 80	„ precipitation of, by tannic acid	15, 473
„ quantity of heat in	1, 282	„ preparation of leucine from	11, 428
„ refractive power of	1, 94	„ putrefaction of	7, 104
		„ of silk	18, 366
		„ vegetable	18, 445
		Gelatinous substances as ferments	7, 98
		Gelin	15, 209
		Gentian-bitter	16, 193
		Gentianates	16, 179
		Gentianic acid	16, 178
		Gentianin, <i>see</i> Gentianic acid.	
		Gentiogenin	16, 192

- Gentisie acid, *see* Gentianic acid.  
 Gentisin, *see* Gentianic acid.  
 Geoceraïn .... 17, 445  
 Geoceric acid .... 17, 445  
 Geocerinone .... 17, 445  
 Geocronite .... 5, 176  
 Geoffroy .... 1, 4  
 Geoffroyine .... 17, 316  
 Geomyricin .... 17, 441; 18, 245  
 Georetic acid .... 17, 444  
 Geraniin .... 18, 227  
 Gerhard's equivalents .... 7, 27  
 „ law of residues .... 7, 76  
 „ platinum-bases, and  
 general theory of  
 the ammoniacal  
 compounds of pla-  
 tinum .... 6, 313  
 German Silver .... 5, 497  
 Germs, vegetable, action of, in  
 inducing fermentation .... 15, 265  
 Getah Lahoe .... 18, 163  
 Geum bitter .... 18, 227  
*Geum urbanum*, oil of .... 14, 370  
 Gibbsite .... 3, 307  
 Gigantolite .... 3, 448  
 Gilding by galvanic precipitation 1, 497  
 Ginger oil .... 14, 370  
 Ginkgoic acid .... 18, 82  
 Gismondine .... 3, 445  
 Glacial Acetic acid .... 8, 287  
 „ Phosphoric acid .... 2, 125  
 Glairidin .... 18, 458  
 Glairin .... 18, 458  
 Glass .... 3, 377  
 „ action of oxalic acid on .... 13, 515  
 „ action of water on .... 2, 61  
 „ of antimony on .... 4, 360  
 „ containing arsenious acid 4, 311  
 „ containing platinous oxide 6, 331  
 „ crystallised .... 3, 384  
 „ decomposition of .... 3, 383  
 „ devitrified .... 3, 384  
 „ diffusion of gases through  
 cracks in .... 1, 23  
 „ etching on, with fluorspar 2, 358  
 „ -fluxes coloured by gold .... 6, 235  
 „ -fluxes containing ferrous  
 and ferric oxide .... 5, 288  
 „ -fluxes containing nickel.... 5, 386  
 „ heavy, optical properties  
 of .... 1, 168  
 „ platinum deposits on .... 6, 275  
 „ heated, effect of, in indu-  
 cing the combination of  
 hydrogen and oxygen .... 2, 52  
 „ soluble .... 3, 371  
 Glauber .... 1, 4  
 Glauberite .... 3, 217  
 Glauber's iron-tree .... 5, 283  
 „ salt .... 3, 100  
*Glaucium luteum*, colouring mat-  
 ter of the petals of .... 17, 163  
 „ *luteum*, preparation of  
 chelerythrine from  
 the roots of .... 17, 157  
 Glaucine .... 17, 161  
 Glaucolite .... 3, 437  
 Glaucomelanate of Potash .... 15, 25  
 Glaucopidine .... 17, 160  
 Gliadin.... 18, 424, 445  
 Globularasin .... 16, 83  
 Globularin .... 15, 344; 16, 82  
 Globularitannic acid .... 16, 83  
 Globulin .... 18, 271  
 „ of blood-corpuscles .... 18, 332  
 „ of the crystalline lens 18, 330  
 Glonoïn .... 10, 562  
 Glow .... 2, 28  
 „ -lamp .... 8, 179-210  
 „ -worm, phosphorescence of 1, 183  
 Glucic acid .... 13, 237  
 Glucina.... 3, 294  
 „ Acetate .... 8, 303  
 „ Aluminate .... 3, 329  
 „ Arseniate .... 4, 310  
 „ Benzoate .... 12, 40  
 „ Carbonate .... 3, 296  
 „ Chromate .... 4, 155  
 „ Cinnamate .... 13, 275  
 „ Citrate .... 11, 452  
 „ Croconate .... 10, 392  
 „ Hydrate .... 3, 295  
 „ Hyposulphite .... 3, 297  
 „ Nitrate .... 3, 300  
 „ Oxalate .... 9, 136  
 „ Phosphates .... 3, 297  
 „ Phosphite .... 3, 297  
 „ Pyrotartrate .... 11, 92  
 „ Rhodizonate .... 10, 402  
 „ Salts, reactions of .... 3, 295  
 „ Selenites .... 3, 298  
 „ Silicates .... 3, 410  
 „ Silicate of, with Silicate  
 of Alumina .... 3, 420  
 „ Succinate .... 10, 122  
 „ Sulphates .... 3, 297  
 „ Sulphite .... 3, 297  
 „ Tartrate .... 10, 291  
 „ Valerate .... 11, 33  
 „ Vanadate .... 4, 102  
 „ and Ammonia, Carbonate  
 of .... 3, 300  
 „ and Ammonia, Oxalate  
 of .... 13, 520  
 „ and Lime, Silicate of .... 3, 411  
 „ and Manganous Oxide,  
 Silicate of .... 4, 245



Glucina and Potash, Carbonate of ....	3, 301	Glucosides, special, description of	15, 414; 16, 102
„ and Potash, compound of ....	3, 300	„ yielding Alizarin by their decomposition ....	16, 33
„ and Potash, Sulphate of	3, 301	Glucosuccinic acid ....	15, 333
„ and Soda, Carbonate of	3, 302	Glucotetratartrates ....	15, 333
„ and Soda, compound of	3, 302	Glue, preparation of ....	18, 354
Glucinum ....	3, 293	Glutamic acid ....	18, 437
„ Alloys ....	3, 302	Gluten ....	18, 447
„ Arsenide ....	4, 310	„ preparation of leucine from ....	11, 328
„ Bromide ....	3, 299	„ putrefaction of ....	7, 104
„ Chloride ....	3, 299	„ -casein ....	18, 439
„ Ferrocyanide ....	7, 486	„ -fibrin ....	18, 441
„ Fluoride ....	3, 300	Glutin, animal ....	18, 353
„ Iodide ....	3, 299	„ conversion of chondrin into ....	18, 359
„ Phosphide ....	3, 299	„ vegetable, syn. with Plant-gelatin ....	18, 445
„ Selenide ....	3, 298	Glycerides ....	9, 490; 13, 572
„ Sulpharsenite and Sulpharseniate ....	4, 310	„ classification of ....	7, 239
„ Sulphide ....	3, 297	„ combinations of ....	7, 244
„ Sulphomolybdate ....	4, 78	„ constitution of ....	7, 234
„ Telluride ....	4, 425	„ copulated nature of ....	7, 238
„ Tellurite and Tellurate ....	4, 425	„ decomposition of, at a red heat ....	7, 241
„ and Iron, alloy of ....	5, 274	„ decomposition of, by Chlorine, Bromine, and Iodine ....	7, 243
„ and Iron, Carbide of	5, 275	„ decomposition of, by oil of vitriol ....	7, 244
„ and Mercury, Chloride of ....	6, 109	„ dry distillation of ....	7, 240
„ and Potassium, Fluoride of ....	3, 302	„ formation of 7, 230; 16, 358	
„ and Silicium, Fluoride of ....	3, 410	„ history of ....	7, 228
Glucobexacitric acid ....	15, 344	„ isomeric, transformations of ....	7, 244
Glucosan ....	15, 329	„ literature of ....	7, 227
„ formation of Dextro-glucose from ....	15, 306	„ melting points of ....	7, 245
Glucose ....	15, 304	„ of polybasic acids ....	13, 580
„ Bistearic ....	17, 126	„ preparation and properties of 7, 230; 16, 358	
„ compounds of, with Salifiable bases ....	15, 324	„ rapid combustion of 7, 243	
„ estimation of ....	15, 313	„ reactions of 7, 231, 240; 16, 359	
„ formation of, from Cane-sugar by the action of dilute acids ....	15, 537	„ slow combustion of ....	7, 241
„ formation of, from Cane-sugar by boiling with water ....	15, 253	„ solidifying points of 7, 245	
„ formation of humous substance by action of alkalis on ....	17, 460	„ sources of ....	7, 230
„ hydrated ....	15, 323	„ yielding fixed acids, decompositions of ....	7, 240
„ ordinary, <i>see</i> Dextroglucose.		„ yielding volatile soap-acids, decompositions of ....	7, 240
Glucosides, formation of Dextro-glucose by decomposition of ....	15, 309	Glyceramine ....	13, 583
„ general view of ....	15, 341	Glycerates, metallic ....	13, 570
„ of Madder, compounds produced by decomposition of ....	16, 47	Glyceric acid ....	13, 568
		Glycerin ....	9, 486
		„ action of Acetyl-bromide on ....	13, 580

Glycerin, action of the bromides of phosphorus on ....	13, 572	Glycol, Monosodic ....	13, 424
„ aqueous, solubility of lime on ....	13, 568	„ oxidation of ....	13, 422
„ artificial formation of	13, 566	„ preparation of ....	13, 422
„ conversion of, into sugar ....	13, 567	Glycol, Propylic ....	13, 554
„ compounds of, with acids ....	9, 490	Glycolamide ....	12, 511
„ formation of Dextro- glucose from ....	15, 310	Glycolates ....	13, 436
„ formation of, in vinous fermentation ....	15, 275	Glycolic acid ....	12, 508
„ Monobenzoate of ....	12, 104	„ acid, formation of, from chloracetic acid ....	13, 435
„ production of, in alco- holic fermentation ....	13, 566	„ Acetobutylin ....	13, 433
„ salts ....	9, 490	„ Biacetin ....	13, 433
„ saponifiable fats yield- ing ....	7, 227	„ Bromhydrin ....	13, 428
„ Terbenzoate of ....	12, 105	„ Butyroacetin ....	13, 433
Glycerobitartronic acid ....	13, 582	„ Chloracetin ....	13, 43
Glycerocitric acid ....	13, 583	„ Chlorhydrin ....	13, 427
Glyceromonotartaric acid ....	13, 581	„ Chlorobutylin ....	13, 432
Glycerosuccinnic acid ....	13, 581	„ Ethers ....	13, 424
Glycerotertartaric acid ....	13, 582	„ Iodacetin ....	13, 431
Glyceroxalic acid ....	13, 581	„ Iodhydrin ....	13, 428
Glyceryl, Dibromochloride ...	13, 578	„ Monoacetin ....	13, 429
„ Bromodichloride ....	13, 578	„ Stearate ....	17, 116
„ Terchloride ....	13, 577	Glycolide ....	12, 511
Glycerylene, Bichloride ....	13, 577	Glycyl, Monobenzoate of ...	12, 104
Glycocol ....	9, 247	„ Terbenzoate ....	12, 105
„ compounds of, with acids ....	9, 251—254	Glycyrrhetin ....	17, 56
„ compounds of, with bases ....	9, 254—259	Glycyrrhizin ....	15, 344; 17, 56
„ copulated acid pro- duced by, with nitric acid ....	7, 226	Glyoxal ....	12, 503
„ with Hydrochlorate of Berberine ....	17, 195	Glyoxylates ....	13, 434
„ with Urate of Am- monia ....	10, 468	Glyoxylic acid ....	17, 505; 13, 434
Glycocholates ....	18, 59	Gmelinite ....	3, 440
Glycocholic acid ....	18, 56	Gmelin's Electro-chemical theory ....	1, 157
Glycocholonie acid ....	18, 62	„ method of calculating the densities of com- pounds ....	1, 76
Glycogen ....	15, 138	Goat's fat ....	16, 391
„ formation of Dextro- glucose from ....	15, 308	Goëmin ....	18,
Glycol ....	12, 501; 13, 422	Gold ....	6, 200
„ action of Antimonious chloride on ....	13, 423	„ Acetate ....	8, 334
„ action of Phosphorus Pentachloride on ....	13, 423	„ Amalgam ....	6, 247
„ action of Sodium on ....	13, 424	„ Ammonio-protocyanide ...	8, 37
„ action of Zinc Chloride on ....	13, 423	„ Antimonide ....	6, 238
„ Amylic ....	13, 557	„ argentiferous ....	6, 247
„ Bisodic ....	13, 424	„ Arsenide ....	6, 238
„ Butylic ....	13, 55	„ atomic weight of ....	6, 205
		„ Benzoate ....	12, 45
		„ Bromides ....	6, 214
		„ Chlorides ....	6, 215
		„ Chrysammate ....	12, 7
		„ fulminating ....	6, 222
		„ in glass fluxes ....	6, 207, 235
		„ Iodides ....	6, 211
		„ leaf, effect of in inducing the combination of hydro- gen and oxygen ....	2, 52
		„ Mercaptide ....	8, 347
		„ Mosaic ....	5, 79; 5, 479
		„ Nitride? ....	6, 222
		„ -ores, amalgamation of ...	6, 201

Gold Osmide ....	6, 423	Gold and Silicium, compound of	6, 235
„ Oxides ....	6, 205	„ and Silver, alloys of ....	6, 247
„ Phosphide ....	6, 210	„ Silver, and Copper, alloy of	6, 251
„ Protiodide ....	6, 211	„ Silver, and Palladium, alloy	
„ Protochloride ....	6, 215	of ....	6, 358
„ Protocyanide ....	8, 34	„ and Silver, amalgam of ....	6, 251
„ Protosulphide ....	6, 210	„ and Silver, separation of ....	6, 201
„ Protoxide....	6, 205	„ and Sodium, Sulphide of ....	6, 230
„ Purple oxide of ....	6, 206	„ and Silver, Telluride of ....	6, 250
„ reactions of ....	6, 209, 216	„ and Tin, alloy of ....	6, 239
„ removal of platinum from,		„ and Tungsten, alloy of ...	6, 237
by fusion with nitre ....	6, 203	„ and Zinc, alloy of ....	6, 239
„ salts, solubility of, in alco-		Golden Sulphuret of Antimony	4, 354
hol ....	8, 272	Gold-of-pleasure seed, oil of ....	16, 315
„ solution, ordinary ....	6, 217	Gold-purple ....	6, 239
„ Sulphides ....	6, 210	Gomart oil ....	14, 291
„ Sulphocacodylate ....	9, 338	„ resin ....	17, 415
„ Sulphocarbonate ....	6, 211	Gong-gongs ....	5, 482
„ Sulphocyanide ....	8, 97	Goose-bile, preparation of tauro-	
„ Telluride ....	6, 238	chenocholic acid from ....	18, 131
„ Terbromide ....	6, 214	„ fat ....	16, 391
„ Terchloride ....	6, 215	<i>Gorteria ringens</i> , emission of	
„ „ acid solution of	6, 217	light by the flowers of ....	1, 187
„ „ compound of,		Göthite ....	5, 197
with ethyl		Gourd-seed oil ....	16, 315
cyanide ....	13, 457	Graduating works ....	3, 111
„ „ compound of, with		Graham's investigations on dif-	
methyl cyanide	13, 412	fusion of gases ....	1, 20
„ „ normal solution		Grain tin ....	5, 67
of ....	6, 216	Grammatite ....	3, 405
„ „ solution of, in		<i>Grana Paradisi</i> , resins of ....	17, 450
volatile oils ....	7, 168	Granatin ....	18, 227
„ Tercyanide ....	8, 36	Grapes, preparation of Dextroglu-	
„ Teriodide....	6, 213	cose from ....	15, 311
„ Teroxide ....	6, 207	Grape-seed oil ....	16, 314
„ Tersulphide ....	6, 210	„ -skins, hard resin of blue....	17, 453
„ and Ammonium, Iodide of	6, 225	„ sugar ....	15, 305
„ and Bismuth, alloy of ....	6, 238	Graphic Tellurium ....	6, 250
„ and Calcium, Cyanide of....	8, 42	Graphite, artificial ....	2, 83
„ and Cobalt, alloy of ...	6, 246	„ in cast-iron ....	5, 205
„ and Cobalt, Chloride of ....	6, 246	„ natural, occurrence of	2, 82
„ and Copper, alloy of ....	6, 246	Graphitic acid ....	14, 517
„ Copper, and Zinc, alloy of	6, 246	Grasses, sugar in the stems of....	15, 239
„ and Copper, Cyanide of?....	8, 42	Gratiolaretin ....	16, 465
„ and Iridium, alloy of ....	6, 393	Gratioletin ....	16, 468
„ and Iron, alloy of ....	6, 245	Gratiolin ....	15, 345; 16, 466
„ and Iron, Carbide of ....	6, 246	Gratioloic acid ....	16, 471
„ and Lead, alloy of ....	6, 245	Gratiosoleretin....	16, 470
„ and Lead, Telluride of? ....	6, 245	Gratiosoletin ....	15, 345; 16, 469
„ and Manganese, alloy of ....	6, 237	Gratiosolin ....	15, 345; 16, 468
„ and Molybdenum, alloy of	6, 237	Gravitation, influence of, on che-	
„ and Mercury of ....	6, 247	mical decomposition....	1, 111
„ and Nickel, alloy of ....	6, 246	Greeks, chemical knowledge of	1, 3
„ and Nickel, Chloride of ....	6, 246	Green colouring matter of this-	
„ and Palladium, alloy of ....	6, 358	tle-tops, artichokes, and	
„ and Platinum, alloy of ....	6, 339	undeveloped flower buds	17, 7
„ and Potassium, alloy of ....	6, 226	„ Ferrocyanide of Potas-	
„ and Potassium, Sulphide of	6, 227	sium ....	7, 468
„ and Rhodium, alloy of ....	6, 368	Greenhartin ....	18, 228



Greenheart tree, preparation of berberine from the bark of ....	17, 170	Guano, preparation of Uric acid from ....	10, 458
Green, imperial ....	8, 329	Guarana, preparation of Caffeine from....	13, 227
„ Lead-ore ....	5, 149	Guaranine ....	13, 224
„ of leaves ....	17, 3	Guayaquillite ....	17, 437
„ Mitis ....	8, 329	Guelder rose, bitter from the bark of ....	18, 243
„ mountain ....	8, 329	Guericke, his experiments on the vacuum ....	1, 4
„ Neuwieder ....	8, 329	Guibert ....	1, 4
„ pigment from the gall- stone of an ox....	18, 80	Gum Ammoniacum ....	17, 396
„ pigment from jaundiced urine ....	18, 80	„ Animé ....	17, 396
„ Prussian ....	7, 446	„ Arabic ....	15, 194
„ salt of Magnus ....	6, 304	„ Benzoin, preparation of Benzoic acid from ....	12, 33
„ Schweinfurt ....	8, 329	„ enumeration of various kinds of ....	15, 196
„ Uranoso-uranic oxide ....	4, 161	„ from gamboge ....	15, 205
„ Vienna ....	8, 329	„ from ipecacuanha root ....	15, 205
„ Vitriol ....	5, 237	„ -lac ....	17, 419
Greenockite ....	5, 57	„ from mangold-wurzel juice	15, 205
Greenovite ....	4, 245	<i>Gummi Caja</i> ....	17, 404
Grey Copper ....	5, 492	„ <i>elasticum</i> ....	17, 344
„ Pig-iron ....	5, 212	„ <i>Sicopira</i> , resin of ....	17, 429
„ Sulphide of Antimony ....	4, 337	Gum-resin of Sabadilline ....	18, 185
Gros' Platinic Sulphate	6, 309—318	„ resins, extraction of vola- tile oils from ....	7, 160
Grossulin ....	15, 393	„ Senegal ....	15, 197
Grotthuss' theory of decom- position by the electric cur- rent ....	1, 432	„ -sugar ....	16, 335
Groups of isomorphous bodies	1, 88 to 91	„ Tragacanth ....	15, 207
Grove's battery ....	1, 422	Gun-cotton, <i>see</i> Pyroxylin ....	15, 168
„ gas battery ....	1, 428	„ -metal ....	5, 482
Guacin....	18, 228	Gunpowder ....	3, 69
Guaiac Beta-resin ....	17, 246	Gurgunic acid ....	17, 545
„ resin ....	17, 247, 618	Gutta ....	17, 337
„ resin, effect of light on the colour of ....	7, 96	Gutta-percha ....	17, 340
„ yellow ....	17, 246	„ -percha, electric insulating power of ....	1, 313
Guaiacene ....	10, 411	Guyton de Morveau's table of decomposing affinities ....	1, 140
Guaiacic acid ....	11, 397; 17, 252	Gymnotus, electric force of ....	1, 429
Guaiacol ....	17, 252	<i>Gypsophila Struthium</i> , prepara- tion of saponin from....	16, 85
Guaiaconic acid ....	17, 155	Gypsum ....	3, 201
Guaiaretic acid ....	17, 241	„ burnt ....	3, 200
Guaiol ....	17, 251	„ diffusion of gases through ....	1, 24
Guanine ....	10, 480	Gyrophoric acid ....	16, 295
„ hydrate ....	10, 480		
„ salts ....	10, 481		
„ with Soda ....	10, 482		
Guano, biliary acid from	18, 69		

## H.

Hæmatin ....	16, 292	Hæmatin, action of sulphuric acid on ....	18, 398
„ action of chlorine on	18, 399	„ crystals, Rollet's ....	18, 404
„ action of alkalis on	18, 402	„ hydriodate of ....	18, 400
„ action of heat on	18, 397	„ hydrochlorate of ....	18, 400
„ action of reducing agents on ....	18, 397	„ non-ferruginous ....	18, 398

Hæmatin, occurrence and preparation of	18, 395, 396	Hare's Calorimeter	1, 410
„ occurrence of, in urinary concretions	18, 410	„ Deflagrator	1, 409
„ properties and composition of	18, 396	Hare's fat	16, 391
„ reactions of, with metallic salts	18, 402	Harmala-red	16, 119
„ Schwarz's	18, 403	Harmaline	16, 116
„ see Hæmatoxylin.		„ preparation of Harmaline from	16, 104
Hæmatite, brown	5, 197	Harmine	16, 103
„ red	5, 194	„ salts	16, 106
Hæmato-crystallin, see Hæmoglobin.		Harmonica, chemical	2, 58
Hæmatoglobulin, see Hæmoglobin.		Harmotome	3, 446
Hæmatoidin	18, 404	Hartin	17, 437
Hæmatosin	18, 395	Hartite	18, 250
Hæmatoxylin	16, 287	Hartmangan	4, 203
„ amorphous	16, 288	Hartmannite	5, 393
„ with Borax	16, 291	Hartshorn, spirit of	2, 423
„ hydrated	16, 290	Hatschetin	18, 250
Hæmin crystals	18, 400	Hausmann's crystallographic nomenclature	1, 17
Hæmoglobin, action of hydro-sulphuric acid and alkaline sulphides on	18, 391	Hazel-nut oil	17, 97
„ action of phosphorated, arsenated and antimoniated hydrogen on	18, 392	Heat, absorption of, accompanying vaporisation	1, 272
„ compound of, with acetylene	18, 395	„ alteration of, by irregular reflection	1, 216
„ compound of, with carbonic oxide	18, 392	„ capacity for	1, 238
„ compound of, with nitric oxide	18, 393	„ -capacity of the atoms of compounds	1, 249
„ hydrocyanate of	18, 394	„ -capacity of the atoms of elementary substances	1, 243
„ occurrence of, in blood	18, 386	„ -capacity of a vacuum	1, 252
„ preparation of	18, 386	„ chemical relations of	1, 252
„ properties of	18, 397	„ -collector of Saussure and Ducarchat	1, 165
„ reduced	18, 390	„ combinations of, with ponderable bodies	1, 252
„ spectrum of	18, 389	„ of combustion	1, 291
Hæmolutein	18, 413	„ of combustion, whence derived	1, 297
Hahnemann's soluble Quick-silver	6, 91	„ -conducting powers of liquids and gases	1, 223
Haidingerite	5, 311	„ -conducting power of solids	1, 221
Hair, action of Acetic acid on	18, 350	„ conduction of, in crystallised bodies	1, 222
„ action of Chlorine, and of Sulphuric acid and peroxide of Manganese on	18, 349	„ decomposition of organic compounds by	7, 77
„ action of hot water on	18, 349	„ developed by combination of the two electricities	1, 315
„ composition of	18, 348	„ development and absorption of, accompanying the solution of liquid and solid bodies in water	2, 69
Hales, his experiments on æri-form bodies	1, 4	„ development and absorption of, from mechanical causes	1, 300
Halloyte	3, 417	„ development of, accompanying adhesion-phenomena	1, 300
Haloforms	7, 24	„ development of, accompanying crystallisation	1, 15
Haloïd salts	2, 15	„ development of, in the	
Halydes	7, 23		

- combination of compound  
bodies .... 1, 294
- Heat, development of, in the  
galvanic decomposition of  
liquids .... 1, 494
- „ development of, by light.... 1, 165
- „ development of light by.... 1, 166
- „ development of, produced  
by mechanical alteration  
of density .... 1, 300
- „ disengagement and ab-  
sorption of .... 1, 291
- „ disinfecting power of .... 7, 83
- „ effect of, in assisting ere-  
macausis .... 7, 95
- „ effect of, on coloured fa-  
brics .... 7, 96
- „ effect of, on the colours of  
bodies .... 1, 238
- „ effect of, in inducing com-  
bustion.... 2, 24
- „ evolution of, accompanying  
eremacausis .... 7, 91
- „ evolution of, during putre-  
faction .... 7, 104
- „ expansion produced by .... 1, 223
- „ free, sensible, or uncombined 1, 252
- „ homogeneous or monochro-  
matic .... 1, 221
- „ of incandescent platinum,  
decomposition of water  
by the .... 1, 301
- „ influence of, on chemical  
combination and decom-  
position .... 1, 301
- „ influence of, on chemical  
decomposition .... 1, 137
- „ influence of, on crystallisa-  
tion .... 1, 8
- „ interchange of, between  
bodies of different tempe-  
ratures .... 1, 213
- „ latent, of liquids.... 1, 252
- „ latent, of vapours .... 1, 282
- „ memoirs relating to .... 1, 209
- „ of moonlight .... 1, 166
- „ physical properties of .... 1, 212
- „ polarization of .... 1, 221
- „ quantity of, in gases .... 1, 282
- „ quantity of, sent annually  
by the sun to the earth 1, 221
- „ quantities of, evolved in  
the combination of dif-  
ferent substances with  
chlorine .... 1, 294
- „ radiant .... 1, 212
- „ -rays, different refrangibi-  
lity of .... 1, 213
- „ -rays, dispersion of .... 1, 165
- Heat, relations of chemical com-  
pounds to .... 1, 93
- „ relative .... 1, 238
- „ specific, *see* Specific Heat 1, 238
- „ spectrum.... 1, 165, 166, 180
- „ table of the quantities of,  
evolved in the combina-  
tion of combustible bodies  
with Oxygen .... 1, 292
- „ transmission of .... 1, 214
- „ of vaporisation .... 1, 282
- „ and light, cause of the de-  
velopment of, in combus-  
tion .... 2, 36
- „ and light, development of,  
in the combination of  
Oxygen with other bodies 2, 27
- „ and light, relations be-  
tween .... 1, 165
- „ and light, theories of the  
relations between .... 1, 167
- Heating power of different parts  
of the Solar Spectrum 1, 165
- „ powers, equal, of the two  
spectra formed by a  
prism of double-re-  
fracting spar .... 1, 166
- Heavy combustible or inflam-  
mable air .... 7, 249
- „ earth .... 3, 134
- „ glass, *see* Glass.
- „ hydrochloric ether .... 8, 373
- „ inflammable air.... 7, 249
- „ metallic oxides .... 2, 39
- „ metallic oxides, hydrosul-  
phates of .... 2, 227
- „ metals .... 3, 2
- „ oil of coal-tar .... 11, 135
- „ oil of wood-tar .... 15, 152
- „ oxygen-ether .... 9, 38
- „ -spar .... 3, 151
- Hebetine .... 5, 47
- Hedera Helix*, resin of .... 17, 415
- Hederic acid .... 15, 521
- Hederine .... 18, 195
- Hederitannic acid .... 15, 522
- Hedwigia, oil of .... 14, 371
- Hedyphane .... 5, 150
- Helenene .... 17, 13
- Helenin .... 15, 112; 17, 522
- Helianthic, or Helianthotannic  
acid .... 15, 345, 522
- Helianthus annuus*, emission of  
light by the flowers  
of.... 1, 187
- „ *annuus*, oil from the  
seeds of .... 16, 315
- Helicin .... 15, 345, 439
- Helicoïdin .... 15, 345, 441



Helleborein ....	18, 127	Hippurate of Cinchonidine ....	17, 227
Helleboresin ....	18, 129	„ Cinchonine ....	17, 219
Helleboretin ....	18, 128	„ Ethyl ....	12, 81
Helleborin ....	18, 128	„ Morphine....	16, 436
<i>Helvella Mitra</i> , fatty oil ob-		„ Strychnine ....	17, 504
tained from ....	17, 97	„ Urea ....	13, 406
Helvine ....	4, 245	Hippurates, Metallic ....	12, 75—80
„ manganese in ....	4, 195	Hippuric acid ....	12, 69
<i>Helwigia balsamifera</i> , Balsam		„ preparation of ben-	
obtained from ....	17, 394	zoic acid from ....	12, 35
Hemibromhydrin ....	13, 576	Hippurobenzoate of Baryta ....	12, 77
Hemipinates, metallic ....	14, 431	Hircic acid ....	10, 89
Hemipinic acid....	14, 430	Hisingerite ....	5, 282
„ acid produced by		Historical Survey of Chemistry...	1, 2—6
the decomposi-		Hog's Lard ....	16, 391
tion of ....	14, 432	Holmesite ....	3, 462
Hemlock, preparation of conine		Homologous series, rise of boiling	
from ....	13, 160	point in successive terms of....	7, 55
Hemp oil ....	16, 312	Homberg ....	1, 4
„ volatile oil of ...	14, 371	Homberg's Phosphorus 1, 154; 3, 206	
Henbane-seed oil ....	16, 314	Honey, Cane-sugar in ....	15, 241
Hencinite ....	5, 276	„ preparation of Dextroglu-	
<i>Hepar antimonii</i> ....	4, 355, 378, 383	cose from ....	15, 311
„ <i>sulphuris calcareum</i> ....	3, 197	„ -stone ....	10, 7
„ „ <i>salinum</i> , v. <i>al-</i>		„ -sugar ....	15, 305
<i>calinum</i> ....	3, 35	Hop-bitter ....	18, 229
Hepatic air ....	2, 195	Hops, oil of ....	14, 291
Hepatin, see Glycogen.		„ wax of ....	18, 160
<i>Heptacarbure quadrihydrique</i> ....	12, 226	Hordeic acid ....	15, 49
Heptasulphide of Ammonium ....	2, 453	Horn, action of hot water on ....	18, 349
Heptylene, from Boghead Cannel		„ action of nitric and sul-	
coal ....	13, 386	phuric acid on....	18, 349
Hesperidin ....	17, 547	„ action of potash on ....	18, 349
<i>Hesperis matronalis</i> , oil from the		„ dry distillation of ....	18, 349
seeds of ....	16, 315	„ preparation of Leucine	
Hetepozite ....	5, 303	from ....	11, 427
Heterocline ....	4, 244	„ preparation of Tyrosine	
Heulandite ....	3, 447	from ....	13, 359
Hexacetoglucose ....	15, 331	Hornbeam wood, dry distillation	
Hexachloracetone ....	13, 467	of ....	15, 149
Hexaglyceric Bromhydrin ....	13, 576	Hornblende ....	3, 405
Hexatomic gas ....	1, 53	Horneblendes rich in iron ....	5, 280
Hezbenzomannitan ....	15, 380	Horn-lead ....	5, 145, 148
Hexbromanthracene ....	16, 169	„ -quicksilver ....	6, 45
Hexhydrate of Cajputene ....	14, 513	„ -silver ....	6, 162
Hexnitrodulcite ....	15, 388	Horny tissue ....	18, 348
Hexyl ....	11, 412	„ action of acetic	
„ from Boghead Cannel		acid on ....	18, 350
coal ....	13, 386	„ coloration of blow-	
„ Alcohol ....	11, 413	pipe flame by ....	18, 257
„ Hydrate ....	11, 413	Horse-chestnut bark, prepara-	
Hexylene from Boghead Cannel		tion of Fraxin	
coal ....	13, 386	from ....	16, 280
Higgin's Xanthin, preparation		„ bark, prepara-	
of ....	14, 136	tion of Aescu-	
High-pressure Steam-engines, ad-		lin from ....	16, 19
vantage of ....	1, 259	„ oil ....	17, 97
Hipparaffin ....	12, 82	„ seeds, bodies	
Hippurate of Ammonia....	12, 75	obtained from 18, 32	

Horse-chestnuts, preparation of saponine from	16, 86	Hydrargomethyl	.... 9, 110
„ preparation of		Hydrargyllite	.... 3, 307
starch from	15, 77	<i>Hydrargyrum</i>	.... 6, 1
Horse fat	16, 392	Hydrastine	.... 17, 543
„ -radish oil	10, 54	<i>Hydrastis canadensis</i> , prepara- tion of berberine from the roots of	.... 17, 186
Houseleek, preparation of malic acid from	10, 210	Hydrates	.... 2, 5, 62
Howard's Fulminating Mercury	9, 300	Hydrate of Alizarin	.... 14, 138
„ „ Silver	9, 303	„ Alloxantin	.... 10, 190
Huano-bark, preparation of Cin- chonine from	17, 200	„ Alumina	.... 13, 306
Human Fat	16, 392	„ Amylene	.... 13, 557
„ caprylic acid in	13, 190	„ Antimonious acid	.... 4, 329
Humboldtite	3, 421	„ Asparagine	.... 10, 244
Humic acid (Sprengel's)	17, 471	„ Auric oxide	.... 6, 209
Humin, action of caustic potash on	17, 465	„ Baryta	.... 3, 135
„ action of chlorine on	17, 464	„ Bergamot-oil	.... 13, 345
„ action of nitric acid on	17, 465	„ Bismuthic acid	.... 4, 433
„ and Humic acid, forma- tion of, from Cane-sugar	15, 255	„ Bismuth-oxide	.... 4, 430
„ -nitric acid	17, 465	„ Bisuccinamide	.... 10, 153
Humocrenic acid	17, 475	„ Bromal	.... 9, 189
Humopic acid	16, 150	„ Bromine	.... 2, 276
Humous acids of Russian Black earth ( <i>Tschornosem</i> )	17, 473	„ Butyl	.... 10, 71
„ substances from dung	17, 476	„ Butylene	.... 13, 556
„ substances formed by the action of acids on cane-sugar	17, 462	„ Cadmic oxide	.... 5, 54
„ substances in general	17, 458	„ Caffeine	.... 13, 231
„ substances from lig- nite	17, 476	„ Cajputene	.... 14, 512
„ substances from peat, rotten wood, and vege- table mould	17, 471	„ Chinoline	.... 13, 243
„ substances from sugar, decomposition - pro- ducts of	17, 464	„ Chloral	.... 9, 205
Humus-extract	15, 257; 17, 474	„ Chlorine	.... 2, 293
Hunt's Iodide of Silver Paper	1, 176	„ Chromic oxide	.... 4, 112
<i>Hura crepitans</i> , resin from the milk of	17, 352	„ Chromous oxide	.... 4, 107
Huraulite	5, 303	„ Cinæbene	.... 14, 320
Hyacinth	3, 463	„ Citric acid	.... 11, 442
<i>Hyænanche globosa</i> , poisonous substance from the husks of	18, 230	„ Cobaltic oxide	.... 5, 337
Hyænates	18, 107	„ Cobaltous-oxide	.... 5, 323
Hyalin	18, 373	„ Creatine	.... 10, 254
Hyalite	3, 355	„ Cresyl	.... 12, 229
Hyalosiderite	3, 395; 5, 278	„ Cupric oxide	.... 5, 407
Hydantoic acid?	10, 264	„ Cuprous oxide	.... 5, 405
Hydrabietic acid	18, 8	„ Ethylene	.... 12, 501
Hydracids	2, 79	„ Ethylene-strychnine	17, 513
Hydranzothin	8, 102, 273	„ Ferric oxide	.... 5, 196
Hydrargallyl	10, 544	„ Ferroso-ferric oxide	5, 192
Hydrargamyl	11, 133	„ Ferrous oxide	.... 5, 187
Hydrargethyl	10, 532; 9, 109	„ Glucina	.... 3, 295
		„ Glucose	.... 15, 323
		„ Guanine	.... 10, 480
		„ Iridic oxide	.... 6, 373
		„ Iridious oxide	.... 6, 371
		„ Laurel-oil	.... 14, 266
		„ Lead-oxide	.... 5, 113
		„ Lemon-oil	.... 14, 300
		„ Lime	.... 3, 182
		„ Magnesia	.... 3, 223
		„ Manganic oxide	.... 4, 203
		„ Manganoso-manganic oxide	.... 4, 202
		„ Manganous oxide	.... 4, 198

Hydrate of Mercuric oxide ....	6, 11	Hydrated Chloride of Bismuth....	4, 439
„ Methylene ....	7, 256	„ Chloride of Cacodyl ?	9, 345
„ Methyl-salicyl ....	12, 255	„ Chloride of Magne-	
„ Molybdic oxide ....	4, 52	„ sium and Potassium	3, 250
„ Molybdous oxide ....	4, 50	„ Chloride of Uranous	
„ Nickel-oxide ....	5, 363	„ oxide and Potassium	4, 189
„ Nicoline ....	14, 226	„ Cupric oxyfluoride ....	5, 443
„ Niobic acid ....	4, 17	„ Fluoboride of Alumi-	
„ Octyl ....	13, 183, 387	„ nium ....	3, 318
„ Cenanthol ....	12, 448	„ Fluoboride of Barium	3, 162
„ Osmic oxide ....	6, 407	„ Fluoboride of Silicium	
„ Osmious oxide ....	6, 406	„ and Cobalt ....	5, 345
„ Palladic oxide ....	6, 345	„ Fluoride of Silicium	
„ Palladious oxide ....	6, 343	„ and Nickel ....	5, 386
„ Pelopic acid ....	4, 21	„ Fluoride of Titanium	
„ Phenyl ....	11, 139	„ and Copper....	5, 466
„ Platinic oxide ....	6, 283	„ Iodide of Palladium....	6, 348
„ Platinous oxide ....	6, 281	„ Iolite ....	3, 435
„ Potash ....	3, 11	„ Monosulphide of Ba-	
„ Propyl ....	9, 398	„ rium with Hydrate	
„ Propylene ....	13, 554	„ of Baryta ....	3, 148
„ Quinine ....	17, 273	„ Oil of Bergamot ....	14, 282
„ Rhodic oxide ....	6, 361	„ Oil of Cubebs ....	16, 271
„ Silica ....	3, 356	„ Oxide of Acetylum ....	10, 538
„ Soda ....	3, 75	„ Oxide of Amyl ....	11, 9
„ Stannic acid, ordi-		„ Oxide of Ethyl ....	8, 194
„ nary ....	5, 74	„ Oxide of Ethylostann-	
„ Stannic acid, anoma-		„ ethyl ....	9, 104
„ lous ....	5, 73	„ Oxide of Lanthanum	3, 277
„ Stannous oxide ....	5, 69	„ Oxide of Tetramethy-	
„ Strontia ....	3, 168	„ lium ....	7, 320
„ Strychnine - brome-		„ Oxide of Stibethylum	10, 527
„ thylammonium ....	17, 513	„ Oxide of Stibmethy-	
„ Tantalac acid ....	4, 3	„ lium ....	7, 323
„ Telluric acid ....	4, 402	„ Oxide of Tetrethylum	9, 66
„ Thorina ....	3, 331	„ Oxide of Turpentine	
„ Titanic acid ....	3, 475	„ oil ....	14, 256
„ Turpentine-oil ....	14, 258	„ Oxychloride of Nickel	5, 378
„ Uranic oxide ....	4, 168	„ Oxyiodide of Nickel ?	5, 375
„ Uranoso-uranic oxide	4, 166	„ Pentasulphide of Ba-	
„ raneous oxide ....	4, 161	„ rium ....	3, 149
„ Uric acid ? ....	10, 466	„ Pentasulphide of Cal-	
„ Vanadic oxide ....	5, 83	„ cium with Lime ....	3, 198
„ Yttria ....	3, 285	„ Perbromide of Sodium	3, 110
„ Zinc-oxide ....	5, 11	„ Peroxide of Nickel ....	5, 366
„ Zirconia ....	3, 342	„ Protiodide of Magne-	
Hydrated Ammonio-bichloride of		„ sium ....	3, 240
„ Platinum ....	6, 306	„ Protochloride of Cop-	
„ Bichloride of Plati-		„ per ....	5, 439
„ num ....	6, 295	„ Ruthenic oxide ....	6, 398
„ Borate of Magnesia		„ Selenide of Hydrogen	
„ and Lime ....	3, 254	„ and Calcium ....	3, 202
„ Bromate of Mercuric		„ Selenide of Zinc ....	5, 27
„ oxide with Nitride		„ Sesquioxide of Iridium	6, 372
„ of Mercury....	6, 83	„ Sesquioxide of Ruthe-	
„ Bromide of Magne-		„ nium ....	6, 397
„ sium and Potassium	3, 250	„ Sesquisulphide of Tin	5, 79
„ Chloride of Aluminium		„ Silico-fluoride of Cad-	
„ with Alumina ....	3, 316	„ mium ....	5, 64



Hydrated Stannous oxychloride	5, 87	Hydriodate of Caprylamine	13, 220
„ Sulphide of Hydrogen		„ Chlorogenine	18, 190
„ and Calcium	3, 197	„ Cinaebene	14, 320
„ Sulphide of Hydrogen		„ Cinchonine	17, 208, 610
„ and Magnesium	3, 235	„ Cinchonine with	
„ Sulphide of Zinc	5, 20	„ cyanide of mer-	
„ Telluric oxide	4, 398	„ cury	17, 214
„ Tellurous acid	4, 398	„ Cinchonine with	
„ Peroxide of Manganese	4, 206	„ mercuric chlo-	
Hydraulic Mortar	3, 389	„ ride	17, 212
Hydric Sulphide	2, 195	„ Cobalt-oxide	5, 335
Hydride of Amyl	11, 6	„ Codeine	17, 33
„ Anisyl	13, 120	„ Cotarnine	16, 132
„ Azoisyl	13, 145	„ Cumidine	13, 350
„ Azobenzoyl	12, 191	„ Ethylamine	9, 59
„ Benzoyl	12, 18	„ Ethylbrucine	17, 587
„ Bismuth ?	4, 433	„ Ethylcodeine	17, 43
„ Bromocumyl	14, 165	„ Ethylconine	13, 171
„ Butyl	10, 69	„ Ethylmethylco-	
„ Chlorocumyl	14, 166	„ nine	13, 173
„ Cinnamyl	13, 258	„ Ethylnicotine	14, 237
„ Copper ?	5, 413	„ Ethylopyridine	10, 408
„ Cumyl	14, 144	„ Ethylphthalidine	13, 35
„ Cyanobenzoyl	12, 212	„ Ethylquinidine	17, 310
„ Ethyl	8, 168	„ Ethylquinine	17, 309
„ Ethyl, its coefficients		„ Ethylstrychnine	17, 511
„ of absorption in		„ Ethyltoluidine	12, 340
„ water	13, 414	„ Ferrous oxide	5, 248
„ Nitrobenzoyl	12, 119	„ Hæmatin	18, 400
„ CEnanthyl	12, 446	„ Harmaline	16, 118
„ CEnanthyl (so called)	12, 450	„ Hydroberberine	17, 254
„ Pentadecatyl	16, 534	„ Lanthopine	18, 197
„ Potassium	3, 17	„ Laudanine	18, 198
„ Quadrichlorocinnamyl	13, 298	„ Lophine	12, 201
„ Rutyl	14, 489	„ Manganic oxide	4, 226
„ Salicyl	12, 235	„ Manganous oxide	4, 226
„ Silicium	3, 359	„ Melaniline	11, 354
„ Suberyl	13, 203	„ Menaphthyla-	
„ Sulphanisyl	13, 131	„ mine	14, 126
„ Sulphobenzoyl	12, 168	„ Mesitylene	9, 26
„ Ternitromethyl	12, 493	„ Metacrolein	13, 552
„ Tetradecatyl	16, 533	„ Methylamine	7, 316
„ Tridecatyl	16, 532	„ Methylbrucine	17, 586
„ Zinc	5, 13	„ Methylcinchoni-	
Hydrides	7, 24	„ dine	17, 233
Hydrindin	13, 89	„ Methylcinchonine	17, 233
Hydriodate of Ammonia	2, 468	„ Methylnicotine	14, 235
„ Aniline	11, 258	„ Methylstrych-	
Hydriodates of Antimonic oxide	4, 363	„ nine	17, 508
Hydriodate of Aricine	17, 570	„ Molybdic oxide	4, 63
„ Benzylene	12, 50	„ Molybdous oxide	4, 63
„ Berberine	17, 190	„ Morphine	16, 431
„ Biethylconine	13, 173	„ Narcotine	16, 143
„ Biethyltoluidine	12, 341	„ Nickel-oxide	5, 375
„ Brucine	17, 580	„ Nitroharmaline	16, 124
„ Cajputene	14, 515	„ Nitroharmine	16, 110
„ Caoutchin	14, 329	„ Papaverine	17, 259
		„ Phosphuretted	
		„ Hydrogen	2, 265

Hydriodate of Picoline ....	11, 268	Hydrobromate of Cinchonine,	
„ Piperidine ....	10, 448	with cyanide	
„ Platonic Iodide....	6, 292	of mercury	17, 214
„ Quinidine ....	17, 299	„ Cobalt-oxide...	5, 336
„ Quinine	17, 279, 615	„ Cumidine ....	13, 350
„ Strychnine ....	17, 493	„ Cupric oxide....	5, 436
„ Telluric Iodide....	4, 409	„ Cuproso-cupric	
„ Teriodide of Ar-		oxide ....	5, 436
senic ....	4, 283	„ Cuprous oxide	5, 436
„ Terebene ....	14, 276	„ Cyaniline ....	11, 361
„ Tetramylamine ....	11, 112	„ Ethylamine....	11, 59
„ Thiosinethylamine	10, 62	„ Ethyl-nicotine	14, 237
„ Triethamylamine	11, 111	„ Ethylene-	
„ Turpentine oil ....	14, 269	strychnine....	17, 512
„ Zinc-oxide ....	5, 28	„ Ferric oxide	5, 251
Hydriodates ....	2, 269	„ Ferrous oxide	5, 250
Hydriodic acid....	2, 261	„ Hydroberberine	17, 255
„ action of, on al-		„ Melaniline ....	11, 354
cohol....	13, 417	„ Menaphthyla-	
„ electrolysis of ....	1, 455	mine ....	14, 126
„ ioduretted ....	2, 261	„ Methylamine	7, 316
„ solution of, in		„ Methylbrucine	17, 586
alcohol ....	8, 264	„ Methylene ....	7, 286
„ sulphate of ....	2, 268	„ Methyl-strych-	
„ Ethers, action of, on		nine ....	17, 508
Sulphocyanides ....	13, 413	„ Naphthylamine	14, 99
„ Ethers, decomposition		„ Nickel-oxide...	5, 376
of Cyanides by ....	13, 408	„ Nitranisidine..	12, 267
„ Methyl-ether ....	7, 285	„ Nitroharmaline	16, 124
Hydriodite of Ammonia	2, 468	„ Phosphuretted	
„ Potash ....	3, 50	hydrogen ....	2, 283
„ Soda ....	3, 106	„ Quadribromo-	
„ Zinc-oxide ....	5, 29	naphthaline	14, 36
Hydriodites ....	2, 261	„ Quinidine ....	17, 299
Hydriodous acid ....	2, 261	„ Stannous oxide	5, 84
Hydrobenzamide ....	12, 191	„ Strychnine ....	17, 93
Hydrobenzile ....	12, 186	Hydrobromates, metallic	2, 286
Hydroberberine ....	17, 253	„ of Terebene ....	14, 276
Hydroboracite ....	3, 254	Hydrobromate of Terbromoben-	
Hydrobromate of Ammonia	2, 469	zene ....	11, 169
„ Ammonia, con-		„ Terbromoco-	
taining Ses-		deine ....	17, 38
quibromide		„ Turpentine oil	14, 269
of Iron ....	5, 262	„ Zinc-oxide ....	5, 29
„ Aniline ....	11, 258	Hydrobromic acid ....	2, 279
„ Antimonic ox-		„ acid gas, absorp-	
ide ....	4, 365	tion of, by volatile	
„ Berberine ....	17, 191	oils and camphors	7, 168
„ Bichlorocincho-		„ acid, action of, on	
nine ....	17, 237	alcohol ....	13, 417
„ Bromocapry-		„ acid, electrolysis of	1, 455
lene ....	13, 216	„ acid, sulphate of	2, 284
„ Bromocodeine	17, 37	„ methyl-ether ....	7, 286
„ Bromocymene	14, 214	Hydrobromous acid ....	2, 279
„ Bromopapave-		Hydrocarbon from oil of Roman	
rine ....	17, 262	Chamomile ....	14, 309
„ Bromostilbene	12, 170	„ C <sup>18</sup> H <sup>12</sup> obtained by	
„ Cadmic oxide	5, 60	distilling eugenie	
„ Caoutchin ....	14, 329	acid with baryta	13, 341

Hydrocarbons from American petroleum ....	16, 532	Hydrochlorate of Athamantin, body obtained from ....	12, 98
„ from Boghead Cannel coal ....	13, 386	„ Atropine ....	16, 454
„ composition and boiling points of	7, 154	„ Auric chloride	6, 216
„ conversion of, into camphors, by taking up the elements of water	7, 167	„ Bebirine ....	17, 172
„ isomeric with Napthalin, obtained by the dry distillation of the Benzoates	14, 11	„ Benzamide ....	12, 142
„ liquid, obtained by distillation of coal-tar ....	15, 155	„ Benzidine ....	11, 340
„ as primary nuclei	7, 153	„ Benzylene ....	12, 50
„ solubility of, in alcohol ....	8, 274	„ Berberine ....	17, 191
Hydrocarburetted Chloride of Platinum ....	8, 388	„ Berberine, with cyanide of mercury	17, 195
Hydrocarotin ....	17, 53	„ Berberine, with glycocoll	17, 195
Hydrochlorates....	2, 353	„ Biamidobenzoic acid ....	12, 150
Hydrochlorate of Acediamine....	13, 535	„ Bibromallylamine ....	13, 549
„ Acetamide ....	12, 543	„ Bibromocinchonine ....	17, 237
„ Aconitine ....	18, 176	„ Bichlorocinchonine ....	17, 238
„ Acrolein ....	13, 551	„ Bichloroharminine ....	16, 108
„ Alanine ....	9, 436	„ Bichlorostilbene ....	12, 172
„ Alumina, preservation of meat by injection with	7, 117	„ Biphenaniline	11, 335
„ Amarine ....	12, 196	„ Borneol ....	14, 353
„ Amidobenzoic acid ....	12, 145	„ Bromaniline...	11, 278
„ Amidocuminic acid ....	14, 175	„ Bromocinchonine ....	17, 235
„ Amidonitriline ....	11, 294	„ Bromocodeine	17, 38
„ Amidosulphobenzene ....	11, 348	„ Bromine ...	2, 350
„ Ammonia ....	2, 478	„ Bromopapaverine ....	17, 262
„ Amylamine....	11, 106	„ Brucine ....	17, 580
„ Amylstrychnine ....	17, 515	„ Butylamine ...	10, 147
„ Aniline ....	11, 259	„ Cadmic oxide	5, 60
„ Anisene ? ....	13, 131	„ Caffeine ....	13, 232
„ Anisine ....	13, 146	„ Caoutchin ....	14, 329
„ Anthranilic acid ....	13, 328	„ Caprylamine	13, 220
„ Antimonic oxide ....	4, 368	„ Carvene ...	14, 284
„ Aribine ....	17, 563	„ Casein ...	18, 314
„ Aricine ....	17, 570	„ Chelerythrine	17, 159
„ Asparagine....	10, 245	„ Chelidonine....	17, 166
„ Aspartic acid	10, 233	„ Chinoline ....	13, 248
„ Athamantin	12, 103	„ Chloraniline	11, 283
		„ Chloranthracene ....	16, 168
		„ Chloretherose	9, 213
		„ Chlorobromonapthalin	14, 71
		„ Chlorocymene	14, 214
		„ Chloronaphthalin....	14, 39
		„ Chloronitroharminine ....	16, 115
		„ Chlorostilbene	12, 171



Hydrochlorate of	Chromic acid	4, 137	Hydrochlorate of	Ethylphthali-	
„	Cinchonidine	17, 225	„	dine	.... 13, 35
		228, 612	„	Ethylquinine	17, 309
„	Cinchonine	.... 17, 209	„	Ethylstrych-	
„	Cinnamic Alde-		„	nine	.... 17, 512
„	hyde	.... 13, 262	„	Fucusine	.... 10, 382
„	Citryl, or of		„	Furfurine	.... 10, 380
„	Citrylene	.... 14, 301	„	Glaucine	.... 17, 161
„	Cobalt-oxide	5, 337	„	Glaucopierine	17, 160
„	Cocaine	.... 16, 302	„	Gomart oil	.... 14, 291
„	Codeine	.... 17, 33	„	Lecithine	.... 18, 377
„	Conhydrine	.... 13, 169	„	Leucine	.... 11, 431
„	Conine	.... 13, 165	„	Lophine	.... 12, 202
„	Copahilene	.... 14, 288	„	Manganic	
„	Copaiba oil	.... 14, 287	„	oxide	.... 4, 229
„	Corydaline	.... 17, 609	„	Manganous	
„	Cotarnamic		„	oxide and	
„	acid	.... 16, 134	„	Ammonia	.... 4, 233
„	Cotarnine	.... 16, 133	„	Melaniline	.... 11, 354
„	Cratinine	.... 10, 258	„	Menaphthyla-	
„	Creatine	.... 10, 254	„	mine	.... 14, 126
„	Cubebene	.... 16, 272	„	Menthene	.... 14, 446
„	Cumaramine	13, 338	„	Mercurialine	18, 201
„	Cumidine	.... 13, 350	„	Mesitylene	.... 9, 27
„	Cupric oxide	5, 439	„	Metacrolein	13, 551
„	Cuproso-cupric		„	Metamorphine	16, 442
„	oxide	.... 5, 438	„	Methylamine	7, 316
„	Cyanic acid	.... 8, 63	„	Methylbrucine	17, 587
„	Cyanic ether	13, 563	„	Methylene	.... 7, 286
„	Cyaniline	.... 11, 361	„	Methyl-piperi-	
„	Cymidine	.... 14, 219	„	dine	.... 10, 450
„	Cystine	.... 9, 439	„	Methyl-strych-	
„	Diniodome-		„	nine	.... 17, 509
	thylamine	.... 7, 319	„	Molybdic acid	4, 65
Hydrochlorates of	Diplatinamine	6, 305,	„	Molybdic ox-	
		316	„	ide	.... 4, 64
Hydrochlorate of	Diplatosamine	6, 300	„	Molybdous	
„	Ethylamine	.... 9, 60	„	oxide and	
„	Guanine	.... 10, 481	„	Ammonia	.... 4, 60
Hydrochlorates of	Glycocoll	.... 9, 252	„	Molybdous	
Hydrochlorate of	Harmaline	.... 16, 118	„	oxide and	
„	Harmine	.... 16, 106	„	Potash	.... 4, 72
„	Hæmatin	.... 18, 400	„	Morphine	.... 16, 431
„	Hydrastine	.... 17, 544	„	Naphthyla-	
„	Hydroerbe-		„	mine	.... 14, 99
„	rine	.... 17, 255	„	Narceine	.... 17, 600
„	Hydrocyan-		„	Narcotine	.... 16, 143
„	harmaline	.... 16, 121	„	Nickel-oxide	5, 378
„	Iridic oxide	.... 6, 380	„	Nicotine	.... 14, 227
„	Lanthopine	.... 18, 197	„	Nitraniline	.... 11, 291
Hydrochlorates of	Lemon-oil	.... 14, 300	„	Nitransidine	12, 267
Hydrochlorate of	Lepidine	.... 14, 104	„	Nitrocodeine	17, 41
„	Ethylamine,		„	Nitroharma-	
„	with cyanide		„	tine	.... 16, 124
„	of mercury	9, 62	„	Nitroharmine	16, 110
„	Ethyleonine	13, 171	„	Nitrotyrosine	13, 363
„	Ethylnicotine	14, 237	„	oil of Berga-	
„	Ethylpiperi-		„	mot	.... 14, 283
	dine	.... 10, 451	„	oil of Elemi	14, 290

Hydrochlorate of oil of Juniper-berries ....	14, 294	Hydrochlorate of Strychnine with mercuric cyanide	17, 500
„ oil of Turpentine ....	14, 265	„ Tantalic acid	4, 6
Hydrochlorates of Orange-peel oil	14, 306	„ Telluric acid	4, 413
Hydrochlorate of Osmic acid ....	6, 413	„ Telluric chloride ....	4, 413
„ Papaverine	17, 259 ; 18, 203	„ Terbromococaine ....	17, 39
„ Paricine ....	17, 572	„ Terchlorobenzene ....	11, 180
„ Pelosine ....	17, 26	„ Terchloronapthalin ....	14, 55
„ Petinine ....	10, 151	„ Terchlorotoluol ....	12, 292
„ Phloramine ....	15, 70	„ Terebene ....	14, 274
„ Phosphuretted Hydrogen ....	2, 331	„ Thebaine ....	17, 169
„ Phthalidine	13, 34	„ Thebenine ....	18, 210
„ Picoline ....	11, 268	„ Thialdine ....	9, 314
„ Piperidine ....	10, 448	„ Thiosinethylamine ....	10, 62
„ Platinic oxide	6, 295	„ Thisosinamine ....	10, 59
„ Platinous chloride ....	6, 293	„ Theobromine	12, 471
„ Platosamine, green ....	6, 304	„ Titanic oxide	3, 480
„ Platosamine, red ....	6, 303	„ Toluidine ....	12, 336
„ Platosamine, yellow ....	6, 302	„ Triphenylamine ....	13, 305
„ Propylamine	9, 412	„ Tungstic acid	4, 37
„ Pseudoquinine	17, 230	„ Tyrosine ....	13, 361
„ Quinidine ....	17, 299	„ Urea ....	7, 369
„ Quinidine with zinc chloride	17, 300	„ Urea, basic ....	13, 403
„ Quinine	17, 282, 615	„ Uranic oxide	8, 182
„ Sarcosine ....	9, 433	„ Uranic oxide and Ammonia ....	4, 186
„ Seminaphthylamine ....	14, 109	„ Uranoso-uranic oxide ....	4, 181
„ Serine ....	18, 369	„ Uranous oxide ....	4, 181
„ Sesquibromocinchonine	17, 236	„ Veratrine ....	18, 183
„ Sesquioxide of Tin ....	5, 87	„ Zinc-oxide ....	5, 31
„ Silica ....	3, 361	Hydrochloric acid ....	2, 319
„ Sinapine ....	14, 526	„ acid, action of, upon alcohol ....	13, 417
„ Solanicine ....	18, 89	„ acid, aqueous ....	2, 323
„ Solanidine ....	18, 87	„ acid, formation of, by combination of chlorine and hydrogen	1, 170 ; 2, 319
„ Solanine ....	18, 96	„ electrolysis of ....	1, 455
„ Stannic oxide	5, 88	„ acid, heat developed in the combination of, with water ....	1, 295
„ and Stannite of Ammonia ....	5, 95	„ acid gas, absorption of, by alcohol	8, 264
„ and Stannite of Baryta ....	5, 99	„ acid gas, absorption of, by volatile oils and camphors	7, 168
„ and Stannite of Magnesia ....	5, 100		
„ and Stannite of Potash ....	5, 98		
„ and Stannite of Soda ....	5, 99		
„ and Stannite of Strontia ....	5, 99		
„ of Strychnine ....	17, 493		

Hydrochloric acid gas, maximum tension of, at different temperatures	1, 261; 2, 503	Hydrocyanate of Solanine	.... 18, 97
„ acid gas, percentage of, in aqueous hydrochloric acid	2, 324	„ Stannic chloride	8, 149
„ acid, impurities in commercial	.... 2, 322	„ Strychnine	.... 17, 499
„ acid and Phosphuretted Hydrogen with Chloride of Titanium	.... 3, 481	„ Titanic chloride	8, 148
„ acid, presence of, in the air	.... 2, 411	Hydrocyanates, metallic	.... 7, 410
„ acid, presence of, in common sulphuric acid	.... 2, 181	Hydrocyanharmaline	.... 16, 120
„ acid, solubility of silver chloride in	6, 428	Hydrocyanic acid	.... 7, 389
„ acid, Sulphate of	.... 2, 341	„ acid, anhydrous, preparation of	.... 7, 394
„ Ether, Bichlorinated	.... 9, 193	„ acid, anhydrous, properties of	7, 55, 399
„ Ether, heavy	.... 8, 373	„ acid, aqueous, preparation of, from Cyanide of Lead	7, 394
„ Ether, heavy, formation of, by the action of chlorine on alcohol	.... 8, 212	„ acid, aqueous, preparation of, from Cyanide of Mercury	.... 7, 393
„ Ether, light	.... 8, 368	„ acid, aqueous, preparation of, from Cyanide of Potassium	.... 7, 392
„ Ether, monochlorinated	.... 8, 368	„ acid, aqueous, preparation of, from Cyanide of Silver	7, 394
„ Ether, quadrichlorinated	.... 9, 213	„ acid, aqueous, preparation of, from Ferrocyanide of Potassium	.... 7, 390
„ Methyl-ethers	.... 7, 287	„ acid, aqueous, proportion of anhydrous acid in, according to the specific gravity	.... 7, 404
Hydrochromocyanic acid	.... 7, 420	„ acid with Bitter Almond oil	.... 12, 28
Hydrochrysammide	.... 12, 14	„ acid, compounds of, with metallic chlorides	.... 8, 148
Hydrocinchonine	.... 17, 230	„ acid, electrolysis of	1, 455
Hydrocinnamide	.... 13, 304	„ acid, formation of, by action of emulsin on amygdalin	7, 389
Hydrocobaltidecyanic acid	.... 7, 492	„ acid, formation of, by the action of nitric acid on organic compounds	7, 124
<i>Hydrocotyle asiatica</i> , bitter of	18, 243	„ acid, formation of, by action of nitric oxide, nitrous acid, or nitric acid on organic compounds	.... 7, 381
Hydrocyanaldine	.... 13, 364	„ acid, formation of, by decomposition of formiate of ammonia	7, 383, 390
Hydrocyanate of Antimonic chloride	.... 8, 149	„ acid, formation of, by oxidation of	
„ Benzile	.... 12, 185		
„ Berberine	.... 17, 194		
„ Cinchonine	.... 17, 213		
„ Codeine	.... 17, 35		
„ Ferric chloride	8, 149		
„ Ferric oxide and Potash	.... 7, 453		
„ Hæmoglobin	.... 18, 394		
„ Morphine with Cyanide of Platinum	.... 16, 433		
„ Platosamine	.... 8, 45		
„ Quinine	.... 17, 286		
„ Quinine with Cyanide of Platinum	.... 17, 287		



	nitrogenous or- ganic compounds	7, 382	Hydrofluatate of Chromic acid	....	4, 139
Hydrocyanic	acid, impurities in	7, 398	„	Cinchonidine	.... 17, 225
„	acid, mixture of, with volatile oils	7, 168	„	Cinchonine	.... 17, 210
„	acid, occurrence of, in the kernels of bitter almonds, plums, &c.	7, 389	„	Cobalt-oxide	.... 5, 337
„	acid, reactions of	7, 400	„	Cumidine	.... 13, 350
„	acid, testing of	7, 396	„	Melaniline	.... 11, 354
Hydrocyanitroharmaline	....	16, 126	„	Mercuric oxide and Ammonia....	6, 91
Hydroelaterin	....	17, 367	„	Methylene	.... 7, 290
Hydroferricyanate of Berberine	17, 195		„	Molybdic acid	.... 4, 65
„	Brucine	17, 583	„	Molybdic oxide	4, 65
„	Cinchonine	17, 214	„	Molybdic oxide and Ammonia....	4, 69
„	Harmaline	16, 119	„	Molybdic oxide and Potash	.... 4, 72
„	Harmine....	16, 107	„	Molybdic oxide and Soda	.... 4, 74
„	Methyl- strychnine	17, 510	„	Molybdous oxide	4, 65
„	Nitrohar- maline	.... 16, 125	„	Molybdous oxide and Ammonia....	4, 69
„	Nitrohar- mine	.... 16, 111	„	Molybdous oxide and Potash	.... 4, 72
„	Quinine	17, 287	„	Molybdous oxide and Soda	.... 4, 74
„	Strychnine	17, 500	„	Morphine	.... 16, 432
Hydroferricyanic acid	....	7, 449	„	Platinic oxide	.... 6, 296
Hydroferrocyanates	....	7, 432	„	Quinine	.... 17, 283
Hydroferrocyanate of Berberine	17, 194		„	Silica and Anti- monic oxide	.... 4, 390
„	Brucine	17, 582	„	Silica and Mangan- ous oxide	.... 4, 244
„	Cincho- nidine	.... 17, 613	„	Silica and Molyb- dic oxide	.... 4, 79
„	Cinchonine	17, 213	„	Silica and Molyb- dous oxide	.... 4, 79
„	Codeine	.... 17, 35	„	Silica and Uranous oxide	.... 4, 192
„	Harmaline	16, 119	„	Silica and Vana- dic acid	.... 4, 104
„	Harmine....	16, 107	„	Silica and Vana- dic oxide	.... 4, 103
„	Methyl- strychnine	17, 510	„	Silica and Zinc- oxide	.... 5, 47
„	Nitrohar- maline	.... 16, 125	„	Stannic oxide	.... 5, 92
„	Nitrohar- mine	.... 16, 111	„	Stannous oxide....	5, 92
„	Quinine	.... 17, 287	„	Strychnine	.... 17, 494
„	Strychnine	17, 499	„	Tantallic acid and Lime	.... 4, 11
„	Veratrine	18, 184	„	Zinc-oxide	.... 5, 33
Hydroferrocyanic acid	7, 429; 9, 506		Hydrofluoric acid	....	2, 360
„	acid, electroly- sis of	.... 1, 456	„	electrolysis of	1, 455
Hydrofluates	....	2, 366	„	solubility of, in alcohol....	8, 265
„	of Ammonia	.... 2, 488	Hydrofluoboric acid	....	2, 364
Hydrofluatate of Ammonia with Fluoride of Aluminium	....	3, 320	Hydrofluosilicic Acid	....	3, 366
„	Ammonia with Chromic fluoride	4, 143	Hydrogen	....	2, 41
Hydrofluates of Boracic acid	....	2, 363	„	-acids	.... 2, 79
Hydrofluatate of Borate of Mag- nesia	....	3, 243	„	-acids, compounds with metallic oxides	2, 10
„	Brucine	.... 17, 581			

Hydrogen-acids, aqueous elec-			bromine in organic	
trollysis of....	1, 455		compounds	7, 122
Hydrogen, Antimonide ? solid....	4, 332	Hydrogen, replacement of, by	chlorine in organic	
„ Antimoniuretted	4, 333	compounds	7, 119	
„ Arsenide, solid	4, 264	„ replacement of, by	iodine in organic	
„ Arseniuretted	4, 264	compounds	7, 122	
„ Bicarburetted	8, 164; 11, 134	„ replacement of, in	nuclei by elements	
„ Bichloride of	2, 325	and compound radi-	cals	7, 18
„ Boruretted	2, 100	„ replacement of, in or-	ganic compounds, by	
„ combination of, with		other elements and	radicals	7, 72
Oxygen	2, 45	„ seleniuretted	2, 241	
„ effect of, on the boil-		„ solubility of, in alcohol	8, 258	
ing points of organic		„ sources of	2, 43	
compounds	7, 57	„ suboxide of ?	2, 79	
„ elimination of, in fer-		„ substitution of, for		
mentation and pu-		chlorine, bromine,		
trefaction....	7, 97	and iodine, in or-		
„ estimation of, in or-		ganic compounds	7, 74	
ganic compounds	7, 86	„ Sulphides of	2, 193	
„ ethylide of	8, 170	„ sulphuretted	2, 195	
„ ferruretted ?	5, 201	„ Telluride of, solid	4, 404	
„ flame of	2, 59	„ zincuretted ?	5, 13	
„ history of	2, 42	„ and Ammonium, Sele-		
„ impurities in	2, 44	nide of	2, 464	
„ light carburetted or		„ and Ammonium, sul-		
protocarburetted	7, 249	phide of	2, 452	
„ memoirs relating to....	2, 41	„ and Antimony, com-		
„ in organic compounds	7, 5	pounds of	4, 332	
„ Peroxide	2, 73	„ and Arsenic, com-		
„ Peroxide, electrolysis		pound of	4, 264	
of	1, 451	„ and Bibromosalicine,		
„ Persulphide	4, 193	sulphide of	12, 290	
„ „ ioduretted	2, 268	„ and Calcium, hydrated		
„ Phosphuretted, liquid	2, 148	selenide of	3, 202	
„ Phosphuretted, gaseous	2, 136	„ and Calcium, hydrated		
„ Phosphuretted, and		sulphide of	3, 197	
Hydrochloric acid		„ and Ethylene, sul-		
with Chloride of Ti-		phide of	8, 403	
tanium	3, 481	„ and Lead, iodide of....	5, 142	
„ Phosphuretted, with		„ and Lithium, fluoride		
Chloride of Alumi-		of	3, 131	
nium	3, 317	„ and Lithium, sulphide		
„ Phosphuretted, with		of	3, 128	
Chloride of Titanium	3, 480	„ and Magnesium,		
„ Phosphuretted, hy-		hydrated sulphide		
driodate of	2, 265	of	3, 235	
„ Phosphuretted, hy-		„ and Mercury, bromide		
drobromate of	2, 283	of	6, 44	
„ Phosphuretted, hy-		„ and Mercury, chloride		
drochlorate of	2, 331	of	6, 61	
„ Phosphuretted with		„ and Mercury, iodide of	6, 40	
Pentachloride of An-		and Oxygen, combina-		
timony	4, 370	tion of, induced by		
„ Platinocyanide of	12, 499			
„ preparation of	2, 43			
„ properties of	2, 44			
„ protophosphide of	2, 135			
„ replacement of, by				

platinum wire or plates ... ..	2, 46	Hydroleic acid ... ..	17, 89
Hydrogen and Oxygen, combination of, induced by spongy platinum	2, 49	Hydrolite ... ..	3, 440
„ and Oxygen, induced by platinum reduced to laminae ... ..	2, 51	Hydromagnesite ... ..	3, 226
„ and Oxygen, combination of, induced by platinum-black....	2, 51	Hydromargaric acid ... ..	17, 89
„ and Oxygen, combination of, induced by iridium, osmium, palladium, gold- and silver-leaf....	2, 52	Hydromargaritic acid ... ..	17, 88
„ and Oxygen, combination of, induced by copper, nickel, cobalt, and iron reduced by hydrogen	2, 53	Hydromellonates ... ..	9, 388
„ and Oxygen, combination of, induced by heated charcoal, pumice, porcelain, rock - crystal and glass ... ..	2, 53	Hydromellone ... ..	8, 386
„ and Oxygen, explosion of ... ..	2, 58	Hydromellonic acid 9, 386 ; 10, 545	
„ and Oxygen, inflammation of a mixture of, by the electric spark ... ..	2, 45	Hydrometer scales, relative values of ... ..	1, 10
„ and Oxygen, heat and light attending the rapid combustion of	2, 58	Hydrophite ... ..	3, 396
„ and Oxygen, retardation of combination of, in contact with platinum, by admixture of various gases ... ..	2, 53	„ from Taberg, vanadium in ... ..	4, 81
„ and Potassium, fluoride ... ..	3, 65	Hydropersulphocyanic acid ... ..	8, 103
„ and Potassium, sulphide ... ..	3, 31	„ acid, solubility of, in alcohol	8, 273
„ and Sodium, fluoride	3, 116	Hydrophyr ... ..	18, 337
„ and Sodium, sulphide	3, 97	Hydropiperate of Ethyl ... ..	15, 13
„ and Strontium, sulphide ... ..	3, 173	Hydropiperates, metallic ... ..	15, 12
Hydrogen-salts ... ..	2, 9	Hydroplatinocyanate of Brucine	17, 583
Hydrogenium ... ..	2, 42	„ Strychnine... ..	17, 501
Hydrogode ... ..	1, 431	Hydroplatinocyanic acid ? ... ..	8, 44
Hydro-gratiosoloretin ... ..	16, 470	„ acid, solubility of, in alcohol ... ..	8, 273
Hydro-iridiocyanic acid ... ..	8, 60	Hydroquinine ... ..	17, 306
Hydrokinone, colourless ... ..	11, 161	Hydroquinone ... ..	11, 161
„ green ... ..	11, 164	Hydrorhodeoretin, <i>see</i> Convolvulic acid.	
„ with acetate of lead ... ..	11, 162	Hydroseleniates ... ..	2, 245
		„ of Ammonia ... ..	2, 464
		„ Manganous oxide ... ..	4, 226
		Hydroselenic acid ... ..	2, 241
		„ ether ... ..	8, 356
		Hydroselenite of Alumina ... ..	3, 314
		Hydroselenite of Baryta ... ..	3, 153
		Hydroselenocyanic acid ... ..	8, 122
		<i>Hydrosiderum</i> ... ..	5, 222
		Hydrosulphate of Aluminic chloride ... ..	3, 317
		Hydrosulphates of the alkalis ... ..	2, 225
		„ Ammonia ... ..	2, 451
		Hydrosulphate of Ammonia with tersulphide of chromium ... ..	4, 142
		„ Arsenious acid ... ..	4, 274
		„ Azobenzoyl ... ..	12, 215
		„ Carvol ... ..	14, 417
		„ Cobalt-oxide... ..	5, 331
		Hydrosulphates of Cyanogen	8, 116, 118
		„ solubility of in alcohol	8, 273
		Hydrosulphate of Ethyl ... ..	8, 340
		„ Ethylamine ... ..	9, 59
		„ Ferric oxide... ..	5, 232
		„ Ferrous oxide ... ..	5, 230



Hydrosulphate of Harmaline ....	16, 118	Hydrosulphuric ethers, quadri-	
Hydrosulphates of heavy metal-		chlorinated ....	9, 214
lic oxides ....	2, 227	Hydrosulphurous acid ....	2, 193
Hydrosulphate of Hydrokinone	11, 162	Hydrotelluric acid ....	4, 404
„ Lime ....	3, 197	Hydrothiocyanic acid ....	8, 113
„ Nickel-oxide....	5, 371	„ acid, solubility	
„ Nickel - oxide		of in alcohol	8, 273
and Ammonia	5, 380	Hydrothiosulphocyanides ....	8, 99
„ Stannous oxide	5, 78	Hydrothiosulphocyanides, solu -	
„ Strychnine ....	17, 491	bility of, in alcohol ....	8, 273
„ Sulpho-carvol	14, 418	Hydrothio-sulphoprussic acid ....	8, 98
„ Ammonia ....	3, 452	Hydrous Aluminate of Lead ....	5, 165
„ Lime ....	3, 198	Hydurilic acid ....	10, 158
Hydrosulphocarbonate of Am-		Hygrine ....	16, 304
monia ....	2, 463	Hygrometer, Daniell's ....	1, 286
Hydrosulphocarbonic acid ....	2, 206	„ of De la Rive....	1, 289
Hydrosulphocyanate of Berbe-		<i>Hymenea Courbaril</i> , gum animé	
rine ....	17, 195	obtained from ....	17, 396
„ Brucine	17, 583	„ <i>Courbaril</i> and <i>H. ver-</i>	
„ Cinchoni-		<i>rucosa</i> , copal obtained	
dine ....	17, 227	from ....	17, 405
„ Cinchonine	17, 215	Hyocholes ....	18, 101
„ Codeine	17, 35	Hyoglycocholes ....	18, 103
„ Harmaline	16, 119	Hyodyslysin ....	18, 100
„ Harmine		Hyoscyamine....	16, 456
	16, 107, 111	<i>Hyoscyamus</i> , eremacausis of ex-	
„ Laudanine	18, 198	tract of ....	12, 92
„ Morphine	16, 434	<i>Hyoscyamus niger</i> , oil from the	
„ Narcotine	15, 145	seed of ....	16, 314
„ Nitrohar-		Hyperhalides ....	7, 24
maline....	16, 125	Hypericum-red....	16, 527
„ Papave -		Hyperiodic acid, <i>see</i> Periodic	
rine ....	18, 203	acid.	
„ Quinine	18, 288	Hyperoxymuriate of Potash ....	3, 58
„ Sinapine	16, 527	Hyperoxymuriatic acid, <i>see</i> Chlo-	
Hydrosulphocyanic acid ....	8, 70	ric acid.	
„ electrolysis		Hypersthene ....	3, 404
of ....	1, 456	Hypoacetylous acid ....	8, 499
„ solubility of		Hypoarsenious Sulphide ....	4, 271
in alcohol	8, 273	Hypobenzoylous acid ....	12, 48
Hydrosulphomellonic acid		Hypobromite of Baryta ....	3, 156
	9, 472 ; 10, 548	„ Lime ....	3, 205
Hydrosulphuric acid ....	2, 195	„ Magnesia ? ....	3, 240
„ acid, absorption		„ Potash ....	3, 54
of by liquid		„ Silver-oxide ....	6, 160
volatile oils ....	7, 167	„ Soda ....	3, 110
„ acid, action of		„ Strontia ....	3, 177
organic com-		Hypobromous acid ? ....	2, 276
pounds on ....	7, 145	Hypochlorate of Potash ....	3, 58
„ acid gas, absorp-		„ Ammonia ? ....	2, 480
tion of, by alco-		Hypochlorates ? ....	2, 311
hol ....	8, 263	Hypochlorites ....	2, 299
„ acid, maximum		„ bleaching power	
tension of, at		of ....	2, 303
different tem-		Hypochlorite of Ammonia ? ....	2, 479
peratures		„ Baryta ....	3, 160
	1, 261 ; 2, 503	„ Cupric oxide ....	5, 442
„ acid, presence of,		„ Lime ....	3, 208
in the air ....	2, 411	„ Magnesia ....	3, 243

Hypochlorite of Potash ....	3, 57	Hyposulpharsenite of Ammonia	4, 288
„ Silver-oxide ....	6, 166	„ Barium ....	4, 301
„ Soda ....	3, 113	„ Calcium....	4, 305
„ Zinc-oxide ....	5, 32	„ Cerium ....	4, 309
Hypochloronitric acid ....	2, 477	„ Magnesium	4, 307
Hypochlorous acid ....	2, 294	„ Manganese	4, 315
„ acid, action of, on		„ Potassium	4, 292
organic com-		„ Sodium ....	4, 297
pounds ....	7, 125	„ Strontium	4, 302
Hypogæic acid....	16, 317	„ Zinc ....	5, 49
„ ether ....	16, 319	„ Zirconium	4, 310
Hypo-hydrosulphate of Ammo-		Hyposulpharsenites ....	4, 272
nia ....	2, 452	Hyposulphate of Alumina ....	3, 312
„ -hydrosulphite of Ammo-		„ Ammonia ....	2, 458
nia ....	2, 453	„ Baryta ....	3, 151
„ -iodide of Magnesia? ....	3, 240	„ Cadmic oxide	5, 58
Hyponitrate of Lead-oxide ....	5, 153	„ Cerous oxide ....	3, 268
Hyponitric acid ....	2, 382	„ Chromic oxide	4, 125
„ acid, action of elec-		„ Cinchonine ....	17, 206
tric current on ....	1, 452	„ Cobalt-oxide ....	5, 333
„ acid, action of, on		„ Cupric oxide ....	5, 424
fatty oils ....	17, 75	„ Ferric oxide ....	5, 237
„ acid, replacement of,		„ Ferrous oxide	5, 236
by Amidogen ....	7, 75	„ Lead-oxide ....	5, 135
„ acid, replacement of,		„ Lime ....	3, 200
by Nitrogen ....	7, 75	„ Lithia ....	3, 129
„ acid, substitution of,		„ Magnesia ....	3, 235
for Hydrogen ....	7, 73	„ Manganous ox-	
Hyponitrous acid, <i>see</i> Nitrous		ide ....	4, 220
acid ....	2, 380	„ Mercuric oxide	6, 27
Hypophosphate of Cobalt-oxide		„ Mercurous oxide	6, 27
and Lime	5, 344	„ Nickel-oxide ....	5, 373
„ Ferric oxide	5, 223	„ Potash ....	3, 39
Hypophosphite of Alumina ....	3, 309	„ Silver-oxide ....	6, 153
„ Ammonia ....	2, 441	„ Soda ....	3, 100
„ Baryta ....	3, 141	„ Stannous oxide	5, 81
„ Cadmic oxide	5, 56	„ Strontia ....	3, 174
„ Cadmic oxide		„ Zinc-oxide ....	5, 22
and Lime? ....	5, 64	Hyposulphates ....	2, 175
„ Cinchonidine	17, 611	Hyposulphide, Phosphoric ....	2, 212
„ Cobalt-oxide	5, 330	„ Phosphorous ....	2, 209
„ Cupric oxide	5, 417	Hyposulphindigotic acid ....	13, 65
„ Ferric oxide ....	5, 223	Hyposulphite of Ammonia ....	2, 454
„ Lead-oxide ....	5, 128	„ Auric oxide and	
„ Lime ....	3, 190	Soda ....	6, 232
„ Magnesia ....	3, 232	„ Aurous oxide	
„ Manganous		and Baryta? ....	6, 233
oxide ....	4, 215	„ Aurous oxide	
„ Nickel-oxide	5, 368	and Soda ....	6, 231
„ Potash ....	3, 27	„ Baryta ....	3, 150
„ Quinine ....	17, 275	„ Berberine and	
„ Soda ....	3, 90	Silver ....	17, 193
„ Strontia ....	3, 171	„ Brucine ....	17, 579
„ Zinc-oxide ....	5, 17	„ Cinchonidine	
Hypophosphites ....	2, 114	17, 224, 611	
Hypophosphoric acid ....	2, 120	„ Cinchonine ....	17, 206
Hypophosphorous acid ....	2, 113	„ Cobalt-oxide ....	5, 333
Hypopicrotoxic acid ....	14, 477	„ Codeine ....	17, 32
Hyposulpharsenious acid ....	4, 271	„ Cuprosoplumbic	5, 485

Hyposulphite, Cuproso-potassic	5, 458	Cyanide of	
„ Cuproso-sodic ....	5, 461	Mercury ....	8, 19
„ of Cuprous oxide	5, 423	Hyposulphite of Quinine ....	17, 276
„ Cuprous oxide		„ Silver-oxide ....	6, 152
„ and Potash ....	5, 458	„ Silver-oxide and	
„ Cuprous oxide		Ammonia ....	6, 173
„ and Soda ....	5, 461	„ Silver-oxide and	
„ Magnesia ....	3, 235	Lead-oxide ....	6, 195
„ Magnesia and		„ Silver-oxide and	
Ammonia ....	3, 247	Lime ....	6, 181
„ Magnesia and		„ Silver-oxide and	
Potash ....	3, 249	Potash ....	6, 178
„ Ethylene ? ....	8, 404	„ Silver-oxide and	
„ Ferric oxide		Soda ....	6, 179
„ and Lime ....	5, 274	„ Silver-oxide and	
„ Ferrous oxide	5, 235	Strontia ....	6, 181
„ Glucina ....	3, 297	Soda ....	3, 98
„ Lead-oxide ....	5, 135	„ Stannous oxide ?	5, 81
„ Lead-oxide and		„ Strontia ....	3, 173
Ammonia ....	5, 158	„ Strychnine ....	17, 491
„ Lead-oxide and		„ Thebaine ....	18, 209
Baryta ....	5, 163	„ Zinc-oxide ....	5, 21
„ Lead-oxide and		Hyposulphites, metallic	2, 161
Lime ....	5, 164	Hyposulphoglutic acid ....	14, 23
„ Lead-oxide and		Hyposulphomethylic acid ....	7, 294
Potash ....	5, 160	Hyposulphophosphate of Manganese ....	4, 225
„ Lead-oxide and		Hyposulphophosphates ....	2, 213
Soda ....	5, 162	Hyposulphophosphite, Cupric ....	5, 431
„ Lead-oxide and		„ Cuprous ....	5, 431
Strontia ....	5, 164	„ Ferrous ....	5, 246
„ Lime ....	3, 199	„ Mercuric	6, 31
„ Mercuric oxide		„ of Silver ....	6, 155
and Ammonia	6, 78	Hyposulphophosphites ....	2, 211
„ Mercuric oxide		Hyposulphophosphoric acid ....	2, 212
and Baryta ....	6, 106	Hyposulphophosphorous acid ....	2, 209
„ Mercuric oxide		Hyposulphuric acid ....	2, 174
and Lime ....	6, 107	„ Bisulphu-	
„ Mercuric oxide		retted ....	2, 164
and Soda ....	6, 103	„ Sulphuretted	2, 166
„ Mercuric oxide		„ Tersulphu-	
and Strontia	6, 107	retted ....	2, 162
„ Mercurous and		Hyposulphurous acid ....	2, 160
Cuprous oxide	6, 131	Hyposulphurous acid, action of,	
„ Mercurous oxide		on mercury salts ....	6, 27
and Potash ....	6, 98	Hypovanadate of Ammonia ....	4, 96
„ Morphine ....	16, 430	„ Potash ....	4, 99
„ Nickel-oxide ....	5, 371	Hyssop oil ....	14, 371
„ Potash ....	3, 36	Hyssopine ....	18, 196
„ Potash with			

## I.

<i>Iberis amara</i> , oil from the herb		Iceland moss, green colouring	
and seed of ....	10, 56	matter of ....	17, 22
Ice, evaporation of, in air at com-		„ moss, preparation of Ce-	
mon temperatures	1, 262, 268	tronic acid from ....	17, 22
„ melting point of ....	2, 61	„ moss, preparation of Li-	
Iceland moss, bitter of ....	18, 230	chenin from ....	16, 129



Ichthyophthalmin ....	3, 393	Indigo-blue, preparation of,	
Icica, Elemi-resin obtained from		from Indican ....	13, 40
various species of ....	17, 413	„ -brown ....	13, 48
„ resin ....	17, 421	„ colourless ....	13, 92
Icican ....	17, 421	„ copper ....	5, 422
Ichthidin ....	18, 385	„ deoxidised ....	13, 92
Ichthin ....	18, 385	„ effect of sunshine on the	
Ichthulin ....	18, 385	colour of ....	7, 95
Idocrase ....	3, 426	„ -forming substances, oc-	
Idrialyn ....	17, 478	currence of, in urine ....	18, 407
Idryl ....	17, 477	„ -green ....	13, 67
Igasuric acid ....	10, 229	„ -green, resinous ....	13, 48
Igasurine ....	17, 589	„ oxidised ....	13, 16
Ignatius beans, preparation of		„ preparation of aniline	
strychnine from ....	17, 481	from ....	11, 247
Igneous fusion of salts....	2, 64	„ preparation of commercial	13, 37
Ilicic acid ....	16, 511	„ preparation of picric acid	
Ilicin ....	16, 511	from ....	11, 212
Ilixanthin ....	16, 510	„ purification of, by oxidi-	
Illuminating power of flame,		sing Indigo-white ....	13, 38
conditions of....	2, 30	„ -red ....	13, 45
Ilmenite ....	5, 289	„ -red, colourless ....	13, 47
Ilmenium ....	4, 20	„ reduced ....	13, 92
Ilvaite ....	5, 285	„ sublimation of ....	13, 39
Imabenzile ....	12, 218	Indigotate of Methylene ....	12, 311
Imasatin ....	13, 106	Indigotic Ether ....	12, 312
Imesatin ....	13, 82	Indigotine ....	13, 36, 96
Imidogen, substitution of, for		Indigo-vat, change of colour of	
oxygen ....	7, 76	cellulose in the ....	15, 144
Imperatorin ....	12, 98	„ -white ....	13, 92
Imperial green....	8, 329	„ -yellow ....	13, 68
Imponderable bodies, chemistry		Indihumin ....	16, 4, 5
of ....	1, 160	Indin ....	13, 85
Inactive Tartaric acid ....	10, 369	„ -potassium ....	13, 86
Incandescence 1, 107, 166, 208; 2, 28		Indiretin ....	16, 4, 7
„ degrees of, ac-		Indirubin ....	16, 3, 7
cording to Pouil-		„ supposed occurrence	
let ....	1, 290	of, in urine....	18, 408
Incoercibles ....	1, 160	Induction, electric ....	1, 318
Incorporation of silver ores ....	6, 134	„ magneto-electric ...	1, 319
Indelibrome ....	13, 112	Inflammable air ....	2, 42
Indian rubber ....	17, 344	„ air, heavy ....	7, 249
„ rubber, Chinese....	17, 352	„ chloroplatinate of	
„ steel ....	5, 206	ammonium ....	8, 391
„ yellow ....	17, 530, 534	„ platino-potassic salt	8, 391
Indican ....	15, 345; 16, 1	Inflammation, spontaneous, of	
„ in urine ....	18, 407	organic bodies ....	7, 85
Indicanin ....	16, 5	Inflection of light ....	1, 164
Indicasin ....	16, 2	Infusible white precipitate	6, 85, 427
Indifferent oil of Cloves ....	14, 285	Infusoria, development of, in pu-	
Indifulvin ....	16, 3, 6	trefying solutions ....	7, 105
Indifuscin ....	16, 6	Ink, blue, formed by dissolving	
Indifuscone ....	16, 4, 6	Prussian blue in aqueous oxalic	
Indiglucin ....	15, 302	acid ....	7, 446
Indigo-bitter, artificial....	11, 212	Inorganic compounds of the first	
„ -blue ....	13, 35	order, classification	
„ -blue, conversion of into		of ....	2, 2
Indigo-white ....	13, 44	„ compounds of the first	
„ -blue, decompositions of	13, 41	order, combinations	

	of, with elementary bodies ....	2, 5	Iodate of Codeine and Ammonia	17, 33
Inorganic compounds of the first order, combinations of two, having no com- mon constituent ....		2, 10	„ Cupric Oxide ....	5, 434
„ compounds of the first order, combinations of two, containing a common element ....		2, 5	„ Ethylostannethyl ....	9, 106
„ compounds of the se- cond order, classifi- cation of ....		2, 5	„ Ferric Oxide ....	5, 249
„ compounds of the third order ....		2, 5	„ Ferrous Oxide ? ....	5, 249
„ materials, formation of inorganic com- pounds from ....		7, 38	„ Lead-oxide ....	5, 143
„ materials, formation of organic compounds from ....		12, 477	„ Lime ....	3, 204
Inosates ....		11, 120	„ Lithia ....	3, 130
Inosinic acid ....		11, 119	„ Magnesia ....	3, 240
Inosite ....		15, 351	„ Manganous Oxide ....	4, 227
„ hydrated ....		15, 354	„ Mercuric Oxide ....	6, 41
Insects, phosphorescence of ....		1, 182	„ Methylostannethyl ....	9, 103
Insolation, phosphorescence by ....		1, 193	„ Nickel-oxide ....	5, 376
Insolinic acid ....		13, 318	„ Nicotine ....	14, 227
Instantaneous crystallisation ....		1, 9	„ Potash ....	3, 51
„ light machine, Dö- bereiner's ....		2, 50, 57	„ Palladious Oxide ....	6, 348
Insulators, electric ....		1, 312	„ Platinic Oxide ....	6, 292
Intensity of the current, influ- ence of, on decomposition ....		1, 439	„ Quinine ....	17, 279
Internal structure of crystals ....		1, 18	„ Silver-oxide ....	6, 158
Interposed plates, effect of, in the voltaic circuit ....		1, 478	„ Soda ....	3, 106
Intervening cells in the voltaic circuit ....		1, 478	„ Soda with Chloride of Sodium ....	3, 121
Inulin ....		15, 112	Iodates, Stannous and Stannic....	5, 83
Inverted sugar ....		15, 254, 336	Iodate of Strontia ....	3, 176
Iodacetates ....		13, 530	„ Strychnine ....	17, 492
Iodacetic acid ....		13, 529	„ Uranic Oxide ....	4, 178
Iodacetin, Glycolic ....		13, 431	„ Uraneous Oxide ....	4, 178
Iodal ....		9, 186	„ Yttria ....	3, 288
Iodaldehydene ....		9, 185	„ Zinc-oxide ....	5, 29
Iodaniline ....		11, 275	Iodethase ....	9, 185
Iodates ....		2, 528	Iodethyl-quinidine, Sulphate of	17, 313
Iodate of Ammonia ....		2, 469	Iodhydrin ....	9, 500
„ Auric Oxide ....		6, 214	„ Glycolic ....	13, 428
„ Baryta ....		2, 154	Iodic acid ....	2, 253
„ Bismuth-oxide ....		4, 437	„ action of, on organic compounds ....	7, 125
„ Brucine ....		17, 580	„ compound of, with Phosphoric acid ....	2, 265
„ Cadmic Oxide ....		5, 59	„ compound of, with Sulphuric acid ....	2, 258
„ Chromic Oxide ....		4, 130	„ Electrolysis of ....	1, 452
„ Cinchonine ....		17, 208	„ Hydrates of ....	2, 257
„ Cobalt-oxide ....		5, 335	„ solution of, in alcohol	8, 264
„ Cobalt-oxide and Am- monia ....		5, 340	„ Oxide ? ....	2, 251
			Iodide of Acetostannethyl ....	9, 101
			„ Acetyl ....	12, 531 ; 9, 185
			„ Allyl ....	13, 541
			„ Amidogen ....	2, 465
			„ Ammonia ? ....	2, 467
			„ Ammonium....	2, 468
			„ Amyl ....	11, 41
			„ Antimony ....	4, 362
			„ Antimony with Sul- phide of Antimony	4, 364
			„ Arsenbiethyl ....	9, 73
			„ Arsenethylum ....	9, 77
			Iodides of Arsenic ....	4, 281
			Iodide of Arsenetriethyl ....	9, 75
			„ Auric....	6, 213

Iodide of Aurous ....	6, 211	Iodide of Mercury and Ammonium	6, 82
„ Barium ....	3, 154	„ Mercury and Barium	6, 106
„ Barium with Cyanide		„ Mercury and Cadmium	6, 124
of Mercury....	8, 22	„ Mercury and Calcium	6, 107
„ Benzoyl ....	12, 107	„ Mercury and Hydrogen	6, 40
„ Benzyl ....	12, 50	„ Mercury and Iron ....	6, 129
„ Bisethyl ....	9, 89	„ Mercury and Potassium	6, 99
„ Bismuth ....	4, 436	„ Mercury and Sodium	6, 104
„ Bismuth and Potas-		„ Mercury and Strontium	6, 107
sium ....	4, 447	„ Mercury and Zinc ....	6, 123
„ Bistannic Triethyl ....	13, 508	„ Mesityl ....	9, 26
„ Butyl ....	10, 100	Iodides, metallic ....	2, 268
„ Cacodyl ....	9, 339	„ metallic, action of, on	
„ Cadmium ....	5, 59	Alcohol ....	13, 418
„ Cadmium and Potas-		„ metallic, compounds of,	
sium ....	5, 64	with Ammonia ...	2, 427
„ Calcium with Cyanide		„ metallic, electrolysis of	1, 456
Mercury ....	8, 23	Iodide of Methstannbiamyl ....	11, 133
„ Capryl ....	13, 193	„ Methyl ....	7, 285 ; 13, 451
„ Cerium ? ....	3, 270	„ Methylene ....	13, 390
„ Cetyl ....	16, 368	„ Methylene-stannethyl	9, 99
„ Chromium ....	4, 129	„ Methyloplumbethyl ....	9, 108
„ Cobalt ....	5, 335	„ Methylostannethyl ....	9, 103
„ Copper ....	5, 433	„ Methyltriethylphospho-	
„ Cuprous, with Xantha-		nium ...	12, 528
mide ....	9, 276, 277	„ Nickel ....	5, 374
„ of Cyanogen ....	8, 135	„ Nitrogen ....	2, 465
„ Cyanogen, solution of,		„ Nitrogen, emission of	
in volatile oils ....	7, 158	light on the sudden	
„ Ethyl ....	12, 512 ; 8, 358	decomposition of ...	1, 206
„ Ethyl, action of Mer-		„ Palladium ....	6, 347
curic oxide on ....	13, 417	„ Phosphorus ....	2, 265
„ Ethyl, action of, on		„ Platinic ....	6, 291
silver-salts ....	13, 451	„ Platinous ....	6, 290
„ Ethyl, action of water		„ of Potassium ....	3, 45
„ Ethyl, preparation of	13, 451	„ Potassium with Cya-	
on....	13, 418	nide of Mercury ....	8, 19
„ Ethylene ....	8, 362	„ Potassium, Iodine, and	
„ Ethylene-stannethyl....	9, 100	Oil of Cinnamon,	
„ Ethylostannethyl ....	9, 105	compound of ....	13, 267
„ Ferrous ....	5, 247	„ Propylene ....	9, 397
Iodides of Gold ....	6, 211	„ Pteyl ....	9, 19
Iodide of Gold and Ammonium	6, 325	„ Salicyl ....	12, 283
„ Glucinum ....	3, 299	„ Selenethyl ....	8, 356
„ Hydrargethyl ....	9, 109	„ Selenium ....	2, 68
Iodides of Iridium ....	6, 378	„ Silver....	6, 151
„ Iron....	5, 247	„ Silver with Nitrate of	
Iodide of Iron with Quinine	17, 284	Mercuric oxide ....	6, 199
„ Lead....	5, 140	„ Silver and Potassium	6, 178
„ Lead and Ammonium		„ Silver paper ....	1, 176
5, 159, 161		„ Sodium ....	3, 105
„ Lead and Hydrogen....	5, 142	„ Sodium with Cyanide	
„ Lead and Sodium ....	5, 163	of Mercury ....	8, 21
„ Lime ? ....	3, 203	„ Spiroyl ....	12, 283
„ Lithium ....	3, 130	„ Stannethyl ....	9, 97
Iodide, Mercuric ....	6, 36	„ Stannic ....	5, 83
„ Mercuric with Nicotine	14, 228	„ Stannous ....	5, 82
Iodide of Mercurotetrethylum	13, 482	„ of Starch ....	15, 97
Iodide, Mercurous ....	4, 34	„ Stibethyl ....	9, 82 ; 10, 528



Iodide of Stibethylium ....	10, 528	Iodine and Magnesium, chloride of ....	3, 243
„ Stibethylium and Mercury....	10, 529	„ memoirs relating to ....	2, 245
„ Stibmethylethylum ....	13, 501	„ -nuclei ....	7, 170
„ Stibmethylum ....	7, 326	„ „ Aldehydes of ....	7, 194
„ Stibtriamyl ....	11, 127	„ in organic compounds ....	7, 5
„ Strontium ....	3, 175	„ with Papaverine ....	17, 258
„ Strontium with Cyanide of Mercury ....	8, 22	„ and Potassium, chloride of ....	3, 63
„ Sulphur ....	2, 267	„ preparation of ....	2, 249
„ Sulphur, sulphate of....	2, 350	„ properties of ....	2, 250
„ Telluramyl ....	11, 45	„ purification of ....	2, 250
„ Telluric, Tellurite of ....	4, 409	„ replacement of, by Amidogen ....	7, 74
„ of Thiosinethylammonium	10, 62	„ reaction of, with Boron....	2, 264
„ Tellurethyl ....	8, 385	„ replacement of, by Hydrogen ....	7, 74
„ Telluromethyl ....	10, 493	„ replacement of, by Sulphur ....	7, 75
Iodides of Tellurium ....	4, 408	„ -salts ....	2, 9, 271
Iodide of Tetramethylum	7, 320 ; 12, 490	„ solution of, in alcohol ....	8, 264
„ Tetrethylum....	9, 67	„ sources of ....	2, 247
„ Tetrethylum and Mercury ....	12, 483	„ substitution of, for Hydrogen....	7, 73, 122
„ Tetrethylphosphonium	12, 527	„ Sulphate of ....	2, 267
„ Triethylamylphosphonium ....	12, 529	Iodite of Potash ....	3, 50
„ Triethylphosphine ....	12, 525	„ Soda ....	3, 106
Iodides of Tin ....	5, 82	Iodo-aurate of Barium....	6, 233
Iodide of Uranium ....	4, 178	„ Iron ....	6, 246
„ Yttrium ....	3, 288	„ Potassium ....	6, 228
„ Zinc ....	5, 28	„ Sodium....	6, 232
„ Zinc and Ammonium....	5, 40	„ Strontium ....	6, 234
„ Zinc and Barium ....	5, 45	Iodo-camphor ....	14, 347
„ Zinc-oxide ? ....	5, 29	Iodochloride of Tin ....	5, 91
„ Zinc and Potassium ....	5, 44	Iodocinchonidine, sulphate of ....	17, 313
„ Zinc and Sodium ....	5, 45	Iodocinchonine, sulphate of ....	17, 313
Iodine, action of, on volatile oils	7, 165	Iodocinnamic acid ....	13, 293
„ and Ammonium, chloride of ....	2, 487	Iodoform ....	7, 331 ; 13, 399
„ aqueous solution of ....	2, 251	„ solubility of in alcohol	8, 273
„ atomic weight of ....	2, 251	Iodo-hydriodate of Berberine ....	17, 190
„ Bromides of ....	2, 285	Iodohydrocarotin ....	17, 54
„ -compound of Bismethyl	9, 88	Iodomecone ....	10, 445
„ compound of, with Brucine ....	17, 577	Iodomeconin ....	14, 437
„ compound of, with Strychnine ....	17, 489	Iodomercurate of Ammonium ....	6, 80
„ Chlorides of ....	2, 346, 348	„ Brucine ....	17, 581
„ compounds of, with Nuclei	7, 212	„ Cinchonidine....	17, 226
„ -compound of Tannic acid from fruits ....	15, 519	„ Cinchonine ....	17, 211
„ electrolysis of aqueous solution of ....	1, 451	„ Lanthopine ....	18, 197
„ and Ethylene-gas, combination of in sunshine	1, 170 ; 8, 362	„ Papaverine	17, 260 ; 18, 203
„ history of ....	2, 247	„ Potassium ....	16, 433
„ Iodide of Potassium, and oil of Cinnamon, compound of ....	13, 267	„ Strychnine ....	17, 497
		„ Tetrethylum....	9, 68
		Iodomercurite of Ammonia ....	6, 80
		Iodomethylselenious acid ....	10, 492
		Iodopalladite of Potassium ....	6, 353
		Iodophenyl-citraconimide ....	11, 322
		Iodopianyl ....	14, 437
		Iodoplatinate of Ammonium ....	6, 300

Iodoplatinate of Barium	....	6, 327	Iridious Oxide ....	....	6, 371
„ Iron	....	6, 337	„ Oxide, Chloro-hyposul-		
„ Potassium	....	6, 321	phate of, with Chloride		
„ Sodium	....	6, 325	of Potassium	...	6, 389
„ Zinc	....	6, 333	„ Oxide, Chloro - hyposul-		
Iodoplatinic acid	....	6, 291	phate of, with Sul-		
Iodoplatinous acid	....	6, 290	phate of Potash	....	6, 388
Iodopropylene	....	9, 427	„ Oxide, Chloro-hyposul-		
Iodopyromeconic acid	....	10, 443	phate of, with Sul-		
Iodoquinicine, Sulphate of	....	17, 313	phate of Potash and		
Iodoquinidine, Sulphate of	....	17, 313	Chloride of Potassium	6, 390	
Iodoquinine, Sulphate of	....	17, 312	„ Oxide, hydrated	....	6, 371
Iodosalicylous acid	....	12, 283	„ Oxide and Potash, Sul-		
Iodostannic acid	....	5, 83	phite of	....	6, 384
Iodostannite of Ammonium	....	5, 93	„ Oxide, Sulphite of, with		
„ Barium	....	5, 99	Chloride of Potassium	6, 388	
„ Potassium	....	5, 97	„ Salts	....	6, 371
„ Sodium	....	5, 98	„ Sulphate	....	6, 377
„ Strontium	....	5, 99	Iridium....	....	6, 369
Iodostannous acid	....	5, 82	„ Amalgam	....	6, 392
Iodostrychnine, Sulphate	....	17, 492	„ Ammonio-protoclchloride?	6, 381	
Iodosulphate, Mercuric	....	6, 41	„ Ammonio-sesquioxide	....	6, 381
Iodosulphide of Antimony	....	4, 363	„ Bichloride	....	6, 380
„ Mercuric	....	6, 41	„ Biniodide	....	6, 378
Iodotellurate of Ammonium	....	4, 415	„ Bioxide	....	6, 373
„ Potassium	....	4, 420	„ Bisulphide	....	6, 376
„ Sodium	....	4, 422	„ -black	....	6, 370
Iodozincate of Sparteine	....	16, 282	„ Blue Oxide of	....	6, 371
Iodous acid	....	2, 252	„ Blue Oxide of, with		
Ioduretted Bisulphide of Carbon	2, 268		Alumina?	....	6, 391
„ Hydriodic acid	....	2, 261	„ Blue Oxide of, with		
„ Persulphide of Hy-			Lime	....	6, 391
drogen	....	2, 268	„ Carbide	....	6, 375
Iolite	....	3, 434	„ Chlorides	....	6, 378
„ hydrated	....	3, 435	„ Hydrated Sesquioxide	6, 372	
Ions	....	1, 431, 433	„ Iodides	....	6, 378
Ipecacuanha root, gum from	....	15, 205	„ Osmide	....	6, 393, 423
Ipecacuanhic acid	....	15, 523	„ Oxides	....	6, 370
<i>Ipomæa orizabensis</i> , occurrence			„ Phosphide	....	6, 375
of Jalapin in the root			„ preparation of		
stock of	....	16, 405			6, 255, 264, 270, 369
„ <i>Turpethum</i> , resin of the			„ Protochloride	....	6, 378
root of	....	17, 453	„ Protoxide	....	6, 371
Ipomæic acid	....	14, 493	„ Protoxide of, with Potash	6, 383	
Iridiate of Potash	....	6, 384	„ Protoxide of, with the		
Iridic Arseniate	....	6, 391	Sesquioxides of Chro-		
„ Chloride	....	6, 380	mium and Iron	....	6, 425
„ Chromate	....	6, 391	„ Protosulphide	....	6, 376
„ Hydrate	....	6, 373	„ -sal-ammoniac	....	6, 382
„ Hydrochlorate	....	6, 380	„ -salts, solubility of, in		
„ Oxide	....	6, 373	alcohol	....	8, 272
„ Oxide with Sulphate of			„ Sesquichloride	....	6, 379
Baryta	....	6, 391	„ Sesquioxide	....	6, 372
„ Oxychloride	....	6, 381	„ Sesquioxide of, with		
„ Salts	....	6, 374	Potash	....	6, 383
„ Sulphate	....	6, 378	„ Sesquioxide, salts of	....	6, 373
Iridiocyanide of Potassium	....	8, 60	„ Sesquisulphide	....	6, 376
Iridious Chloride	....	6, 378	„ spongy, effect of, in in-		
„ Nitrate	....	6, 381	ducing the combination		

	of oxygen and hydro-				Iron, Azelaate ....	17, 81
	gen ....	2, 52			„ bar or wrought ....	5, 205
Iridium,	Sulphate of Sesquioxide				„ Benzoates ....	12, 42
	of ....	6, 378			„ Bimethylophosphate ....	12, 483
„	Sulphides ....	6, 376			„ Bismuthide ....	5, 312
„	Terchloride ....	6, 381			„ Bisulphide ....	5, 232
„	Teroxide ....	6, 375			„ Bisulphide, with Proto-	
„	Teroxide with Potash ....	6, 384			arsenide of Iron ....	5, 309
„	Tersulphide ....	6, 377			„ -black ....	5, 193
„	and Ammonium, bichlo-				„ -blueing Tannic acids ....	15, 452
	ride of ....	6, 382			„ Bromides ....	5, 250
„	and Ammonium, proto-				„ Butyrate....	10, 87
	chloride of ....	6, 382			„ (ferricum) Camphorate ....	14, 461
„	and Ammonium, sesqui-				„ Carbide ....	5, 202
	chloride of ....	6, 382			„ cast, action of acids on ....	5, 215
„	and Copper, alloy of ....	6, 392			„ Chlorides ....	5, 251
„	and Gold, alloy of ....	6, 393			„ Chrysammates ....	12, 6
„	and Lead, alloy of ....	6, 392			„ -cinder ....	5, 281
„	and Platinum, alloys of	6, 393			„ -cinder, brown ....	5, 308
„	and Potassium, bichlo-				„ -cinder, white ....	5, 307
	ride of ....	6, 386			„ Cinnamate ....	13, 276
„	and Potassium, proto-				„ Cobaltidecyanide....	7, 497
	chloride of? ....	6, 385			„ cold-short ....	5, 205
„	and Potassium, sesqui-				„ Cuprocyanide ....	8, 7
	chloride of ....	6, 385			„ Cyanides, compounds of....	7, 428
„	and Potassium, sulphide				„ Disulphide ....	5, 227
	of ....	6, 384			„ Ethylosulphite ....	8, 410
„	and Potassium, terchlo-				„ Eugenate ....	14, 206
	ride of? ....	6, 387			„ Fluorides....	5, 256
„	and Silver, alloy of ....	6, 392			„ with Fluxes ....	5, 272
„	and Silver, chloride of	6, 392			„ Gallate ....	12, 410
„	and Sodium, bichloride				„ -glance ....	5, 194
	of ....	6, 391			„ -greening tannic acids ....	15, 451
„	and Sodium, protochlo-				„ Hydrated Cyanides of	7, 435, 437
	ride of? ....	6, 390			„ Hydrothiosulphocyanide....	8, 101
„	and Sodium, sesquichlo-				„ Iodides ...	5, 247
	ride of ....	6, 390			„ Iodo-aurate ...	6, 246
„	and Tin, alloy of ....	6, 391			„ Lecanorate ....	12, 379
<i>Iris florentina</i> ,	acid soft resin				„ Magnetic Oxide of	5, 190
	of the root				„ magnetisation of, by the	
	of ....	17, 449			electric current ....	1, 307
„	camphor of ....	14, 372			„ malleable ....	5, 205
Irite ....		6, 425			„ Manganide ....	5, 300
Iron, Acetates ....		8, 320			„ Meconates ....	12, 429
„ Acetates, action of heat					„ meteoric ....	5, 395
on ....		10, 512			„ meteoric, Cobalt in	5, 316
„ Alloys ....		5, 315			„ meteoric, Nickel in	5, 355
„ Amalgam ....		6, 128			„ Molybdide ....	5, 297
„ Ammonio-protoclhoride		5, 262			„ -nickel-pyrites ....	5, 396
„ Ammonio-sesquichloride		5, 263			„ Nitride ....	5, 257
„ Amylosulphate ....		11, 59			„ Nitroprusside ....	8, 133
„ Antimonide ....		5, 310			„ Nitrosalicylate ....	12, 310
„ -apatite ....		5, 302			„ Oleate ....	17, 72
„ Argentocyanide ....		8, 31			„ -ore, blue ....	5, 224
„ arsenical ....		5, 304			„ -ore, brown ....	5, 196
„ Arsenides....		5, 303			„ -ore, manganiferous mag-	
„ association of arsenic and					netic ....	5, 300
copper with ....		4, 250			„ -ore, spathic ....	5, 219
„ Aurocyanide ....		8, 42			„ -ore, yellow ....	5, 286



Iron-ores, occurrence of humus			
in       ....       ....       ....	17,	460	
„ -ores and slags, vanadium			
in       ....       ....       ....	4,	81	
„ Oxides       ....       ....       ....	5,	184	
„ Oxides, compounds of, with			
cane-sugar       ....       ....	15,	290	
„ passive state of       ....       ....	1,	355	
„ passive state of, explana-			
tion of       ....       ....       ....	1,	360	
„ Peroxide....       ....       ....	5,	194	
„ Per-salts of       ....       ....	5,	198	
„ Phosphide       ....       ....	5,	222	
„ Platino-platinidecyanide ....	8,	55	
„ Proto-arsenide of, with Bi-			
sulphide of Iron       ....	5,	309	
„ Protochloride       ....       ....	5,	251	
„ Protocyanide       ....7, 430 ;	13,	407	
„ Protofluoride of, with Mono-			
hydrofluat of Ferrous			
oxide       ....       ....       ....	5,	256	
„ Rhodizonate       ....       ....	10,	403	
„ Protiodide       ....       ....	5,	247	
„ Protosalts of       ....       ....	5,	188	
„ Protosulphide       ....       ....	5,	228	
„ Protoxide       ....       ....	5,	187	
„ Prusside ....       ....       ....	7,	429	
„ Pyrites       ....       ....       ....	5,	232	
„ reactions of       ....5, 188, 194, 198			
„ red Oxide       ....       ....	5,	194	
„ reduced by Hydrogen,			
effect of, in inducing the			
combination of Hydro-			
gen and Oxygen       ....	2,	53	
„ reduced from the Peroxide			
by Hydrogen, reaction of,			
with Nitric acid       ....	1,	360	
„ refined       ....       ....       ....	5,	205	
„ -rust       ....       ....       ....	5,	196	
„ -salts, <i>see</i> Ferric and Fer-			
rous salts.			
„ -salts, solubility of, in Alco-			
hol       ....       ....       ....	8,	271	
„ Seale-oxide       ....       ....	5,	190	
„ Selenide ....       ....       ....	5,	246	
„ Selenocyanide       ....       ....	8,	124	
„ Sesquichloride       ....       ....	5,	253	
„ Sesquicyanide       ....       ....	7,	448	
„ Sesquifluoride       ....       ....	5,	256	
„ Sesquifluoride of, with Bi-			
fluoride of Titanium       ....	5,	292	
„ Sesquioxide       ....       ....	5,	194	
„ Sesquisulphide       ....       ....	5,	231	
„ Silicate of protoxide of,			
with Silicate of Alumina	3,	420	
„ Silicide       ....       ....       ....	5,	277	
„ -spar       ....       ....       ....	5,	219	
„ Specular....       ....       ....	5,	194	
„ stone, blue       ....       ....	5,	280	
Iron-stone, lenticular grey ....	5,	284	
„ -stone, red       ....       ....	5,	194	
„ Styphnate       ....       ....	11,	234	
„ Suboxide       ....       ....	5,	187	
„ Sulphides       ....       ....	5,	227	
„ Sulphocyanides       ....       ....	12,	499	
„ Sulphovinates       ....       ....	8,	427	
„ Tantalide       ....       ....	5,	392	
„ Tartrovinat       ....       ....	10,	342	
„ Telluride       ....       ....	5,	312	
„ Thiacetate       ....       ....	13,	449	
„ Titanide ?       ....       ....	5,	289	
„ Titaniferous       ....       ....	5,	289	
„ Uranide ?       ....       ....	5,	300	
„ wrought ....       ....       ....	5,	205	
„ and Aluminium, alloy of....	5,	275	
„ and Aluminium, carbide of	5,	276	
„ and Ammonium, proto-			
chloride of       ....       ....	5,	263	
„ and Ammonium, sesqui-			
chloride of       ....       ....	5,	263	
„ and Barium, alloy of       ....	5,	273	
„ and Barium, sulphide of	5,	273	
„ and Bismuth, cyanides of	7,	489	
„ and Cadmium, cyanides of	7,	490	
„ and Calcium, sulphide of	5,	274	
„ and Cerium, carbide of ....	5,	274	
„ and Chromium, carbide of	5,	300	
„ and Chromium, cyanides			
of       ....       ....       ....	7,	487	
„ and Cobalt, alloy of       ....	5,	354	
„ and Copper, alloy of       ....	5,	489	
„ and Copper, carbide of ....	5,	489	
„ and Copper, sulphantimo-			
nate of....       ....       ....	5,	492	
„ and Copper, sulphide of....	5,	489	
„ and Copper, sulphostan-			
nate of....       ....       ....	5,	496	
„ Copper, and Zinc ? alloy of	5,	496	
„ and Glucinum, alloy of ....	5,	274	
„ and Glucinum, carbide of	5,	275	
„ and Gold, alloy of       ....	6,	245	
„ and Gold, carbide of       ....	6,	246	
„ and Lead, alloy of       ....	5,	315	
„ and Magnesium, alloy of....	5,	274	
„ and Manganese, cyanides of	7,	488	
„ and Manganese, carbide of	5,	301	
„ and Mercury, bromide of	6,	129	
„       „       chloride of....	6,	129	
„       „       iodide of       ....	6,	129	
„ and Molybdenum, cyanides			
of       ....       ....       ....	7,	487	
„ and Nickel, alloys of       ....	5,	394	
„       „       carbide of       ....	5,	396	
„       „       sulphide of       ....	5,	396	
„ and Palladium, alloy of ....	6,	357	
„       „       carbide of       ....	6,	357	
„ and Platinum, alloy of ....	6,	336	
„       „       carbide of....	6,	336	

Iron and Potassium, alloy of ....	5, 264	Isatylim....	....	....	13, 114
"          "      antimonide		Isatimide	....	....	13, 114
of ....	5, 312	Isatin ....	....	....	13, 51
"          "      bismuthide		Isatosulphites ....	....	....	13, 57
of ....	5, 312	Isatosulphurous acid ....	....	....	13, 56
"          "      boride of....	5, 268	Isatyde....	....	....	13, 98
"          "      ferricyanide		Iserine ....	....	....	5, 291
of ....	7, 477	Isethionate of ammonia, prepara-			
"          "      ferrocyanide		tion of Taurine from ....			9, 285
of ....	7, 474	Isethionates, metallic ....	....	....	8, 428
"          "      protochlor-		Isethionic acid ....	....	....	10, 518
ide of ....	5, 271	Isobiglycolethylenates ....	....	....	15, 234
"          "      protofluo-		Isobinitramidin....	....	....	15, 111
ride of ....	5, 271	Isocajputene ....	....	....	14, 511
"          "      sesquichlo-		Isocetic acid ....	....	....	16, 365
ride of ....	5, 271	Iso-dimorphous compounds ....	....	....	1, 99
"          "      sesquifluo-		Isodulcite ....	....	....	16, 535
ride of ....	5, 271	Isomerism ....	....	....	1, 108
"          "      sulphide of	5, 268	"      in organic compounds			7, 66
" and Quinine, sulphate of....	17, 284	Isomorphism ....	....	....	1, 87—93
" and Rhodium, carbide of....	6, 368	"      importance of, in			
" and Silicium, carbide of ....	5, 288	the determination			
"          "      protofluoride		of atomic weights			1, 48
of ....	5, 288	"      polymeric ....			1, 93
" and Silver, alloy of ....	6, 195	<i>Isonandra Gutta</i> , gutta percha			
"          "      carbide of ....	6, 196	obtained from ....	....	....	17, 337
"          "      sulphide of ....	6, 196	Isonitramidin ....	....	....	15, 106
" and Sodium, sulphide of ....	5, 272	Isoprene ....	....	....	14, 331
" and Tin, alloy of ....	5, 314	Isotartaric acid ....	....	....	10, 330
"          "      carbide of ....	5, 315	Isotartrate of Ammonia ....	....	....	10, 331
"          "      cyanides of ....	7, 490	"      Baryta ....	....	....	10, 332
" and Zinc, cyanides of ....	7, 489	"      Copper ....	....	....	10, 333
Iron and Tungsten, carbide of ....	5, 297	"      Lead ....	....	....	10, 332
" and Uranium, cyanides of ....	7, 488	"      Lime ....	....	....	10, 332
" and Vanadium, cyanides of ....	7, 487	"      Potash ....	....	....	10, 332
" and Zinc, alloy of ....	5, 312	"      Silver ....	....	....	10, 333
"          "      carbide of ....	5, 314	Isoterebenthene ....	....	....	14, 271
Irradiation, phosphorescence by	1, 193	Itaconanilic acid ....	....	....	11, 324
Isamates ....	13, 110	Itaconanilide ....	....	....	11, 369
Isamic acid ....	13, 109	Itaconates ....	....	....	10, 426
Isamide....	13, 111	Itaconic acid ....	....	....	10, 424
Isatan ....	13, 97	Ittnerite ....	....	....	3, 456
Isatates....	13, 55	Ivy-resin ....	....	....	17, 415
Isatic acid ....	13, 54	Ixolyte ....	....	....	17, 439
Isatides, metallic ....	13, 53				

## J.

Jacobi's electrotpe process ....	1, 502	Jalappin, <i>see</i> Jalapin.	
Jaguar's lard ....	16, 392	Jalap-root, tuberos, resin soluble	
Jalapic acid ...	16, 408	in ether obtained from ....	16, 159
Jalapin ....	15, 345 ; 16, 405	Jamaïcine ....	17, 314
Jalapinol ....	16, 404	Jamamay silk ....	18, 364
Jalapinolate of Ethyl ....	16, 403	"      colouring matter	
Jalapinolates, metallic ....	16, 402	of ....	18, 368
Jalapinolic acid....	16, 400	Jamesonite ....	5, 176
Jalappic acid, <i>see</i> Jalapic acid.		Japan wax ....	16, 393

Japan wax, composition of ....	7, 238	Jelly from pine-needles ....	13, 239
„ preparation of palmi- tic acid from ....	16, 353	„ of silk ....	18, 366
Japonic acid ....	12, 394	„ from <i>Syringa vulgaris</i> ....	15, 412
Jasmin-camphor ....	14, 372	„ vegetable....	15, 393
Jasper ....	3, 352	„ from Yellow Pods ....	15, 412
<i>Jatropha Curcas</i> , acrid resin of	17, 449	Jervine ....	18, 147
„ oil of....	17, 140	Jews, chemical knowledge of ....	1, 3
„ ricinoleic acid in the oil of....	17, 131	Jonquil, oil of ....	14, 373
„ <i>glauca</i> , oils of ....	17, 141	<i>Juglans regia</i> , oil from the seeds of ....	16, 313
„ <i>glandulifera</i> , oils of ....	17, 141	Juniper-berries, oil of ....	14, 292
Jaulingite ....	17, 438	„ resins of ....	17, 449
<i>Jaune brillant</i> ....	5, 57	Juniper-camphor ....	14, 295
Jaundiced urine, green pigment from ....	18, 80	Juniperin ....	17, 449
Jelly from pine-bark ....	13, 240	<i>Junkerite</i> ....	5, 219
		<i>Jupiter</i> , syn. of Tin ....	5, 66

## K.

Kaempferide ....	18, 230	Kinate of Mercury ....	16, 233
Kalaite ....	3, 309	„ Morphine ....	16, 436
Kali ....	3, 10	„ Nickel ....	16, 232
Kalium....	3, 3	„ Potash ....	16, 227
Kane's Amidogen theory ....	2, 429	„ Quinine ....	17, 294
Klant's theory of the nature of Matter ....	1, 159	„ Silver ....	16, 233
Kaolin ....	3, 419	„ Soda ....	16, 228
Kapnite ....	5, 16	„ Strontia ....	16, 228
Karpholite ....	4, 245	„ Zinc....	16, 230
Katechin ....	12, 388	Kinhydrone ....	11, 164
Kawaine ....	18, 196	Kinic acid ....	16, 222
Kawalier's resin from <i>Pinus</i> <i>sylvestris</i> ....	15, 34	„ decompositions of ....	16, 225
Kelp ....	3, 78	„ preparation of ....	16, 223
„ preparation of Iodine from	2, 249	„ properties of ....	16, 224
Kepler ....	1, 4	„ sources of ....	16, 223
Keratin ....	18, 348	Kinic ether ....	16, 234
Kermes, Mineral ....	4, 340	Kinide ....	16, 234
Ketones ....	7, 44, 214	Kinotannic acid ....	15, 525
Kibdelophane ....	5, 290	Kinone ....	11, 158
Kidney-beans, Alkaloïd prepared from, by Stenhouse ....	10, 408	Kino-red ....	15, 327
Kilbrickenite ....	5, 175	Kinova bitter ....	18, 26
Kinanilide ....	16, 235	Kinovatannic acid ....	15, 346
Kinate of Ammonia ....	16, 227	Kinovates ....	18, 25
„ Baryta ....	16, 228	Kinovic acid ....	18, 24
„ Cadmium ....	16, 230	Kinovin ....	15, 345; 18, 26, 36
„ Cinchonidine ....	17, 227	„ compounds of, with me- tallic oxides ....	18, 29
„ Cinchonine ....	17, 220	„ -sugar ....	15, 345
„ Cobalt ....	16, 232	Kinovou acid ....	15, 32
„ Copper ....	16, 232	Kircher ....	1, 4
„ Ethyl ....	16, 234	Klaproth: his mineralogical researches ....	1, 5
„ Iron ....	16, 231	<i>Klaprothium</i> , syn. of Cadmium	5, 52
„ Lead ....	16, 230	Klumene ....	8, 150
„ Lime ....	16, 229	Knebelite ....	5, 279
„ Magnesia ....	16, 230	Knoblauch's experiments on radiant heat....	1, 214
„ Manganese ....	16, 230	Kopp's atomic volumes, method	



	of reducing, to atomic numbers ....	1, 74	Krantzite ....	17, 439
Kopp's	law of the boiling points of organic compounds ....	7, 56	Krokydolite ....	5, 281
Koussin	....	18, 123	Kryolite ....	3, 326
<i>Krameria triandra</i> ,	Tannic acid from ....	15, 529	Kunkel ....	1, 4
			Kunkel's Phosphorus	2, 102
			Kyanethine ....	13, 236
			Kyanising of Wood	7, 116

## L.

Labdanum or Ladanum	....	17, 422	Lactic acid, anhydrous ....	11, 435, 501
Labrador	....	3, 436	Lactic fermentation	7, 98
Laburnine	....	18, 196	Lactide....	11, 435
<i>Lac sulphuris</i>	....	2, 159	Lactin ....	15, 217
Laccin	....	17, 420	Lactocaramel	15, 228
<i>Lacerta agilis</i> , phosphorescence of the eggs of	....	1, 183	Lactone ?	11, 497
Lactamate of Ammonium	....	11, 471	Lactoprotein	18, 318
Lactamic acid	....	11, 471	Lactose....	15, 217, 227
Lactamide (of Pelouze)	....	11, 471	Lactous fermentation	15, 276
Lactates	....	11, 480	Lactucarium	16, 275
Lactate of Alumina	....	11, 486	Lactucerin	16, 274
„ Ammonia	....	11, 481	Lactucic acid	16, 278
„ Baryta	....	11, 481	Lactucin	16, 276
„ Bismuth	....	11, 487	Lactucopierin	16, 278
„ Cadmium	....	11, 489	<i>Laëtia resinosa</i> , resin of	17, 422
„ Chromium	....	11, 486	Laevo-camphor	14, 350
„ Cobalt	....	11, 492	„ -camphoric acid	14, 463
„ Copper	....	11, 493	Lævoglucose	15, 335
„ Ethyl	....	11, 496	Lævoracemic acid	10, 365
„ Ethyl with Chloride of Calcium	....	11, 497	Lævotartaric acid	10, 365
„ Ferrous	....	11, 490	Lævulosan	15, 358
„ Ferric	....	11, 492	Lagoons, Tuscan, Boracic acid in the water of	2, 97
Lactates of Lead	....	11, 489	Lamellar zeolite	3, 447
Lactate of Lime	....	11, 482	Lamp without flame	3, 179, 210
„ Lime with Chloride of Calcium	....	11, 484	Lampblack, manufacture of	15, 159
„ Lime and Potash	....	11, 484	Lampic acid	8, 180
„ Lime and Soda	....	11, 485	<i>Lampyris</i> , phosphorescence of	1, 183
„ Magnesia	....	11, 485	<i>Lana philosophica</i>	5, 5
„ Manganese	....	11, 486	Laçon balsam, volatile oil of	14, 373
„ Mercuric	....	11, 494	„ or Landsome balsam	17, 394
„ Mercurous	....	11, 494	Lantanuric acid ?	9, 445
„ of Nickel	....	11, 492	Lanthanum	3, 274
„ Potash	....	11, 481	„ Acetate	12, 512; 8, 303
„ Quinine	....	17, 292	„ Bromate	3, 279
„ Silver	....	11, 495	„ Chloride	3, 279
„ Soda	....	11, 481	„ Cinnamate	13, 275
„ Stannic	....	11, 489	„ Carbonate....	3, 278
„ Stannous	....	11, 489	„ and Didymium, separation of, from cerium	3, 260, 275
„ of Strontia	....	11, 482	„ Hydrated oxide	3, 277
„ Uranium	....	11, 486	„ Nitrate	3, 279
„ Zinc	....	11, 488	„ Oxalate	9, 134
„ Zinc and Potassium	11, 488		„ Oxide	3, 275
„ Zinc and Sodium	11, 488		„ Peroxide	3, 278
Lactic acid	....	11, 472		

- Lanthanum, Phosphate .... 3, 278  
 „ Salts .... 3, 277  
 „ separation of, from  
   didymium 3, 275, 280  
 „ Sulphate .... 3, 278  
 „ Sulphide .... 3, 278  
 „ Tartrate .... 10, 291  
 „ and Potash, Sul-  
   phate of .... 3, 279  
 Lanthopine .... 18, 197  
*Lapis causticus* .... 3, 11  
 „ *infernalis* .... 6, 170  
 „ *lazuli* .... 3, 457  
 „ *specularis* .... 3, 201  
 Laserpitin .... 18, 83  
 Lasionite .... 3, 310  
 Laskowski's researches on pro-  
   teides .... 18, 253  
 Lassaigue's sulphocyanogen? 8, 113  
 Latent affinity .... 1, 124  
 „ heats of fusion, table of 1, 255  
 „ heats of vapours, tables  
   of .... 1, 283, 284  
 „ and specific heats, rela-  
   tion between .... 1, 256  
*Lathyrus angustifolius*, bitter  
   principle of .... 18, 231  
 Laudanine .... 18, 197  
 Laughing gas .... 2, 373  
 Laurate of Ethyl .... 15, 49  
 Laurates, metallic .... 15, 47  
 Laurel fat .... 16, 393  
 „ oil .... 12, 29  
 „ oil of Guiana .... 14, 296  
 „ resin of .... 17, 450  
 „ -turpentine camphor .... 14, 296  
 „ water .... 12, 29  
 „ water and Bitter Almond  
   water, distinction be-  
   tween .... 12, 31  
 „ water, valuation of .... 12, 30  
 Laurent's Bromanchlonaph-  
   tone, A .... 14, 79  
 „ Bromenchlonaph-  
   tose, A .... 14, 78  
 „ Bromides of Bro-  
   naphthin.... 14, 34, 35  
 „ Bromochlornaph-  
   tune, B .... 14, 82  
 „ *Bromure de Chlo-  
   rébronaphtine* .... 14, 76  
 „ Chlorébronaphtine 14, 73  
 „ Chlorenbronaphtone,  
   B .... 14, 77  
 „ Chloride of Naph-  
   thalin and Chlo-  
   naphthise .... 14, 58  
 „ *Chlorure de Chlo-  
   naphthane* .... 14, 57  
 Laurent's classification of or-  
   ganic compounds.... 7, 23  
 „ nucleus-theory .... 7, 18  
 Lauric acid .... 15, 43  
 „ aldehyde .... 15, 43  
 „ ether .... 15, 50  
 „ and Myristic acids, melt-  
   ing points of mixtures  
   of .... 16, 214  
 „ and Stearic acids, melt-  
   ing points of mixtures  
   of .... 17, 113  
 „ Myristic, and Palmitic  
   acids, melting and soli-  
   difying points of mix-  
   tures of .... 16, 364  
 Laurin .... 15, 52  
 Laurone .... 15, 50  
 Laurostearin .... 7, 238; 15, 50  
 Laurostearone .... 15, 50  
*Laurus Camphora*, Camphor-oil  
   from .... 14, 314  
 „ *Camphora*, volatile oil  
   of .... 14, 356  
 Lavender oil .... 14, 374  
 „ water .... 7, 168  
 Lavoisier: his chemical dis-  
   coveries .... 1, 5  
 Law of residues, Gerhard's.... 7, 76  
 Laws of chemical combination 1, 39—64  
 „ regulating the magnitude  
   or strength of affinity .... 1, 143  
 Lazulite .... 3, 328  
 Lead .... 5, 105  
 „ Acetates .... 8, 310  
 „ Acetate, basic .... 13, 445  
 „ Acetate of, with Hydroki-  
   none .... 11, 162  
 „ Acetate of, with Thionaph-  
   thamate of Lead .... 14, 117  
 „ Acetobenzoate .... 12, 42  
 „ Acetokinate .... 16, 231  
 „ Acetomyristate .... 16, 213  
 „ action of water on .... 5, 114  
 „ Aescinate .... 18, 37  
 „ Albuminate .... 18, 306  
 „ Alloxanate .... 10, 166  
 „ Alloys .... 5, 181  
 „ Alizarite .... 14, 141  
 „ Aloetate .... 12, 11  
 „ Amalgam .... 6, 126  
 „ Amidobenzoate .... 12, 146  
 „ Amilate .... 15, 100  
 „ Ammonio-mucate .... 11, 508  
 „ Ammonio-citrate .... 11, 456  
 „ Ammonio-chloride .... 5, 159  
 „ Ammonio-iodide .... 5, 159  
 „ Amygdalate .... 15, 430  
 „ Amylomalate .... 11, 80

Lead, Amylophosphate....	11, 51	Lead Caprate ....	14, 488
„ Amylosulphate ....	11, 59	„ Caprylate ....	13, 193
„ Amylosulphite ....	11, 53	„ Carbide?....	5, 122
„ Amylotartrate ....	11, 82	„ Carbobenzoate ....	12, 48
„ Amyloxanthate ....	11, 61	„ Carbohydrokinovate ....	16, 238
„ Anacardate ....	17, 521	„ Carbolate ....	11, 152
„ Angelate....	10, 415	„ Carbonates ....	5, 122
„ Anisate ....	13, 127, 585	„ Cerotate ....	18, 137
„ Antimoniate ....	5, 175	„ Cetrarate ....	17, 24
„ Antimonide ....	5, 174	„ Chelidonate ....	12, 419
„ Apocrenate ....	17, 470	„ Chlorate ....	5, 148
„ Apoglucate ....	13, 366	„ Chloride ....	5, 145
„ Arabate ....	15, 203	„ „ with arseniate of	
„ Argentiferous, cupellation		lead ....	5, 174
of ....	6, 133	„ „ with phosphate	
„ Argentiferous, treatment		of lead and	
of, by fractional crystal-		calcium ....	5, 164
lisation: <i>Pattinson's</i>		„ Chloriodide ....	5, 151
<i>process</i> ....	6, 133	„ Chlorisatate ....	13, 76
„ Argentocyanide ....	8, 31	„ Chlorite ....	5, 148
„ Arseniate ....	5, 173	„ Chlorobenzoates ....	12, 114
„ Arseniate of, with Chlo-		„ Chlorocarbonate ....	5, 148
ride of Lead ....	5, 174	„ Chloroflicite ....	16, 129
„ Arsenide ....	5, 172	„ Chlorofluoride ....	5, 151
„ Arsenite ....	5, 173	„ Chlorophosphate ....	5, 149
„ Aspartate ....	10, 237	„ Chlorophosphite ....	5, 149
„ Aurocyanide ....	8, 42	„ Chlorosulphate ....	5, 150
„ Azophosphate ....	5, 158	„ Chlorosulphide ....	5, 150
„ Benate ....	17, 559	„ Chlorosulphomethylate ....	7, 302
„ Benzilate ....	12, 183	„ Cholate ....	18, 51
„ Benzoates ....	12, 41	„ Choloide ....	18, 55
„ Benzoglycolate ....	12, 68	„ Chromate ....	4, 105; 5, 169
„ Betuloretate ....	17, 404	„ Chromidcyanide? ....	7, 428
„ Bibasic acetate ....	8, 313	„ Chrysammate ....	12, 5
„ Bibromacetate ....	12, 535	„ Chrysanilate ....	12, 331
„ Bibromisate ....	13, 71	„ Chrysophanate ....	16, 175
„ Biethylophosphate ....	8, 402	„ Cimicate ....	16, 285
„ Bimethylophosphate ....	12, 483	„ Cinnamate ....	13, 276
„ Binitrobenzoate ....	12, 136	„ Cissotannates ....	15, 517
„ Binitrocarbolate ....	11, 208	„ Citraconate ....	10, 421
„ Bisulphetholate ....	12, 517	„ Citrates ....	11, 455, 456
„ Bisulphohydrokinovate ....	16, 242	„ Cobaltidcyanide ....	7, 495
„ Bisulphometholate ....	12, 485	„ Comenate ....	11, 387
„ Boheate ....	12, 474, 475	„ Convolvulate ....	16, 158
„ Borofluoride ....	5, 151	„ Convolvulinolate....	16, 152
„ Boronitride? ....	5, 158	„ Copaivate ....	17, 327
„ Borosilicate ....	5, 165	„ Crenate ....	17, 468
„ Bromacetate ....	12, 533	„ Cuprocyanide ....	8, 7
„ Bromate ....	5, 145	„ Cyanate ....	8, 68
„ Bromerucate ....	17, 561	„ Cyanide ....	7, 427
„ Bromide ....	5, 144	„ Cyanurate ....	9, 454
„ Bromocarbonate ....	5, 145	„ Digitalate ....	16, 340
„ Bromopyromeconate ....	10, 446	„ -earth ....	5, 127
„ brown oxide of ....	5, 120	„ Elaidate ....	17, 77
„ Butyrate....	10, 86	„ Ellagate ....	16, 189
„ Caffetannate ....	15, 507	„ Erucate ....	17, 551
„ Caincate ....	18, 146	„ Ethionate ....	8, 434
„ Callutannate ....	15, 515	„ Ethyl-compounds contain-	
„ Camphorate ....	14, 461	ing ....	9, 106



Lead Ethylophosphate ....	8, 401	Lead Metaphosphate ....	5, 131
„ Ethylosulphite ....	8, 410	„ Metatartrate ....	10, 329
„ Euchroate ....	10, 20	„ Molybdate ....	5, 167
„ Eugenate ....	14, 206	„ Molybdide ....	5, 167
„ Euxanthate ....	17, 534	„ Mucate ....	11, 508
„ Evernitate ....	16, 448	„ Myristate ....	16, 213
„ Extract of ....	8, 314	„ Naphthionate ....	14, 114
„ Ferrieyanide ....	7, 491	„ Nitranisate ....	13, 139, 586
„ Ferrocyanide ....	7, 490	„ Nitrate ....	5, 156
„ Filicate ....	16, 128	„ „ with fluoride of	
„ flowers of ....	5, 108	„ lead ....	5, 158
„ Fluoride ....	5, 151	„ Nitrite ....	5, 152
„ „ with nitrate of		„ Nitro-aspartate ....	10, 237
„ lead ....	5, 158	„ Nitrobenzoate ....	12, 126
„ Fulminurate ....	10, 560	„ Nitro-euxanthate....	17, 538
„ Fumarate ....	10, 28	„ Nitrohippurate ....	12, 131
„ Gallate ....	12, 410	„ Nitrophthalate ....	13, 29
„ Gambodate ....	17, 418	„ Nitrosalicylate ....	12, 309
„ Gentianate ....	16, 181	„ Nitrosalicylite ....	12, 305
„ -glass ....	5, 166	„ Cenantate ....	12, 486
„ Glucate ....	13, 239	„ Cenanthylate ....	12, 453
„ Glycerate ....	13, 572	„ Oleate ....	17, 72
„ Glycolate....	13, 437	„ Opianate ....	14, 429
„ Glyoxalate ....	12, 507	„ -ore, brown ....	5, 149
„ Guaiaretate ....	17, 245	„ -ore, corneous ....	5, 148
„ Hemipinate ....	14, 431	„ -ore, green ....	5, 149
„ Hippurate ....	12, 79	„ -ore, white ....	5, 126
„ Hyæenate....	18, 107	„ Osmiamate ....	6, 421
„ Hydrothiosulphocyanide....	8, 101	„ Osmiate ....	6, 421
„ Hydrous aluminate of ....	5, 165	„ Oxalates ....	9, 154
„ Hyoglycocholate....	18, 105	„ Oxalonitrates ....	9, 155
„ Hyponitrate ....	5, 153	„ Oxatolyate ....	17, 154
„ Hypophosphite ....	5, 128	„ Oxides ....	5, 107
„ Hyposulphate ....	5, 135	„ -oxide, aqueous solution of	5, 114
„ Hyposulphite ....	5, 135	„ -oxide with Asparagine ....	10, 247
„ Iodate ....	5, 143	„ -oxide with cobaltid-	
„ Iodide ....	5, 140	„ cyanide of lead ....	7, 496
„ Iodopyromeconate ....	10, 444	„ -oxide with hyponitric	
„ Isobiglycolethylenate ....	15, 237	„ acid ....	2, 386
„ Isotartrate ....	10, 332	„ -oxide with cupric oxide	5, 485
„ Jalapate ....	16, 410	„ -oxide with cuprous oxide	5, 484
„ Jalapinolate ....	16, 402	„ -oxide expansion of, on so-	
„ Kinate ....	16, 230	„ lidifying from fusion ....	1, 256
„ Lactates ....	11, 489	„ -oxide, fused, electrolysis	
„ Lecanorate ....	12, 379	„ of ....	1, 459
„ Leucate ....	15, 61	„ -oxide, hydrate of ....	5, 113
„ Lichenate ....	16, 196	„ Oxybromide ....	5, 144
„ Linoleate ....	16, 308	„ Oxychloride ....	5, 146
„ Lithofellate ....	17, 377	„ Oxycyanide ....	7, 427
„ Malate ....	10, 223	„ Oxyfluoride ....	5, 151
„ Maleate ....	8, 158	„ Oxy-iodide ....	5, 141
„ Mandelate ....	12, 59	„ Oxysulphocyanide ....	8, 88
„ Manganidcyanide ....	7, 428	„ Oxyurate....	10, 171
„ Mannitates ....	15, 383	„ Oxyxanthate ....	8, 463
„ Meconate ....	12, 428	„ Palmitates ....	16, 362
„ Mellitate....	10, 8	„ Parellate ....	16, 299
„ Mellonide ....	9, 393	„ Pectate ....	15, 408
„ Mercaptide ....	8, 345	„ Perchlorate ....	5, 148
„ Mesaconate ....	10, 430	„ Periodate....	5, 144

Lead Peroxide ....	5, 120	Lead Styphnate ....	11, 234
„ Persulphocyanide ....	8, 107	„ Suberate ....	13, 210
„ Persulphomolybdate ....	5, 168	„ Suboxide ? ....	5, 107
„ Phloretate ....	13, 311	„ Succinate....	10, 124
„ Phosphate ....	5, 130	„ Sucrates ....	15, 288
„ Phosphate with Hydrate		„ Sugar of ....	8, 316
of Alumina ....	5, 165	„ Sulphacetate ....	8, 437
„ Phosphide ....	5, 128	„ Sulphamidonate ....	15, 105
„ Phosphite ....	5, 129	„ Sulphanisate ....	13, 128
„ Phosphonitrate ....	5, 158	„ Sulphantimoniate ....	5, 177
„ Phthalate ....	13, 13	„ Sulphantimonite ...	5, 175
„ Picramate ....	11, 245	„ Sulpharseniate ....	5, 174
„ Picrates ....	11, 223	„ Sulpharsenite ....	5, 174
„ Pimarate ....	17, 324	„ Sulphate ....	5, 136
„ Pipitzahoate ....	16, 265	„ Sulphate, with Fluor-spar	5, 164
„ Platino-platinidecyanide	8, 55	„ Sulphocarbonate ....	5, 138
„ Propionate ....	10, 555	„ Sulphetherate ....	10, 519
„ Protoxide ....	5, 108	„ Sulphides....	5, 132
„ Protoxide, solution of, in		„ Sulphindigotate ....	13, 64
volatile oils ....	7, 168	„ Sulphite ....	5, 135
„ Protosulphide ....	5, 132	„ Sulphobenzoate ....	12, 55
„ Purpurate ....	10, 199	„ Sulphobismuthate ....	5, 179
„ Pyrogallate ....	11, 401	„ Sulphocacodylate....	9, 338
„ Pyroguaiacate ....	12, 352	„ Sulphocamphorate ....	13, 380
„ Pyrolivilate ....	14, 207	„ Sulphocaprylate ....	13, 197
„ Pyromeconate ....	10, 442	„ Sulphocarbonate ....	5, 138
„ Pyromellitate ....	10, 15	„ Sulphocyanide ....	8, 87
„ Pyromucate ....	10, 385	„ Sulphomesitylo-sulphate	9, 30
„ Pyrophosphate ....	5, 131	„ Sulphomethylate ....	7, 306
„ Pyrotartrate ....	11, 94	„ Sulphomolybdate ....	5, 168
„ Racemate ....	10, 357	„ Sulphosalicylate ....	12, 280
„ reactions of ....	5, 115	„ Sulphosomethylate ....	7, 300
„ red oxide....	5, 118	„ Sulphosuccinate ....	10, 131
„ refined ....	5, 106	„ Sulphotellurite ....	5, 178
„ Retene-bisulphate ....	17, 13	„ Sulphotoluate ....	12, 231
„ Rhodizonate ....	10, 403	„ Sulphotungstate ....	5, 167
„ Ricinelaïdate ....	17, 137	„ Sulphovinate ....	8, 425
„ Ricinoleate ....	17, 134	„ Sylvate ....	17, 322
„ Roccellate ....	16, 477	„ Tannates ....	15, 467
„ Ruberythrate ....	16, 43	„ Tartrate ....	10, 312
„ Rubianate ....	16, 41	„ Tartrelate ....	10, 337
„ Rubichlorate ....	16, 68	„ Tartromethylate ....	10, 339
„ Saccharates ....	11, 520	„ Tartrovinatate ....	10, 342
„ Salicylate ....	12, 252	„ Taurocholate ....	18, 68
„ Salicylite ....	12, 243	„ Tellurate ....	5, 178
„ Santalate....	16, 261	„ Telluride ....	5, 177
„ -salts ....	5, 115	„ Tellurite ....	5, 178
„ Sarcolactate ....	11, 500	„ Terchlorofilicate ....	16, 130
„ Sebate ....	14, 498	„ Terebentilate ....	13, 119
„ Selenide ....	5, 139	„ Terechrysate ....	11, 425
„ Selenite ....	5, 139	„ Tetrathionate ....	5, 135
„ Selenocyanide ....	8, 124	„ Thiocyanide ....	8, 114
„ Sesquioxide ? ....	5, 120	„ Thionaphthamate ....	14, 117
„ Silicate ....	5, 165	„ Thionurate ....	10, 185
„ Silicide ....	5, 165	„ Trithionate ....	5, 135
„ Silicofluoride ....	5, 166	„ Tungstide ....	5, 166
„ -spar ....	5, 126	„ Uranate ....	5, 172
„ Stannate ....	5, 180	„ Urate ....	10, 476
„ Stearate ....	17, 111	„ Uroxonate ....	10, 479

- Lead Valerate .... 11, 34  
 „ Vanadate .... 4, 81; 5, 168  
 „ -vinegar .... 8, 314  
 „ Viridate .... 15, 511  
 „ -vitriol .... 5, 136  
 „ white .... 5, 123  
 „ Xanthate.... 8, 457  
 „ and Ammonium, Chloride of .... 5, 160  
 „ and Ammonium, Hyposulphite of.... 5, 158, 159  
 „ and Ammonium, Iodide of 5, 161  
 „ and Ammonium, Malate of 10, 224  
 „ and Ammonium, Sulphate of .... 5, 159  
 „ and Ammonium, Tartrate of .... 10, 313  
 „ and Antimony, Amalgam of .... 6, 127  
 „ and Antimony, Tartrate of .... 10, 313  
 „ and Barium, Chloride of.... 5, 163  
 „ and Barium, Sulphide of.... 5, 163  
 „ and Barium, Hyposulphite of .... 5, 163  
 „ and Bismuth, amalgam of 6, 127  
 „ and Bismuth, alloy of .... 5, 178  
 „ Bismuth and Tin, alloys of .... 5, 180  
 „ and Cadmium, Cyanide of 7, 428  
 „ and Calcium, Carbonate of 5, 164  
 „ and Calcium, Hyposulphite of .... 5, 164  
 „ and Chromium, Tartrate of 10, 313  
 „ and Copper, Chromate of 5, 486  
 „ and Copper, Hyposulphite of ? .... 5, 485  
 „ and Copper, alloys of .... 5, 484  
 „ and Copper, Antimonide of 5, 487  
 „ and Copper, Selenide of .... 5, 485  
 „ and Copper, Sulphide of.... 5, 485  
 „ Copper, and Antimony, Sulphide of .... 5, 487  
 „ Copper, and Bismuth, Sulphide of .... 5, 488  
 „ Copper, Tin, and Zinc, alloy of .... 5, 488  
 „ and Gold, alloy of .... 6, 245  
 „ and Hydrogen, Iodide of.... 5, 142  
 „ and Iridium, alloy of .... 6, 392  
 „ and Iron, alloy of .... 5, 315  
 „ and Manganese, compounds of .... 5, 172  
 „ and Mercury, Cyanide of ? 8, 24  
 „ and Mercury, Selenide of 6, 127  
 „ and Nickel, alloy of .... 5, 394  
 „ and Palladium, alloy of .... 6, 357  
 „ and Platinum, alloy of .... 6, 335  
 „ and Potassium, alloy of .... 5, 160
- Lead and Potassium, Arsenide of 5, 174  
 „ and Potassium, Bromide of 5, 162  
 „ and Potassium, Tartrate of 10, 313  
 „ and Potassium, Hyposulphite of.... 5, 160  
 „ and Potassium, Sulphate of .... 5, 161  
 „ and Rhodium, alloy of .... 6, 368  
 „ and Silver, alloy of .... 6, 194  
 „ and Silver, Cyaurate of .... 9, 458  
 „ and Silver, Hyposulphite of .... 6, 195  
 „ and Silver, Oxide of .... 6, 195  
 „ and Silver, Sulphide of .... 6, 195  
 „ Silver, and Antimony, Sulphide of .... 6, 195  
 „ and Sodium, alloy of .... 5, 162  
 „ and Sodium, Bromide of.... 5, 163  
 „ and Sodium, Carbonate of 5, 162  
 „ and Sodium, Chloride of.... 5, 163  
 „ and Sodium, Hyposulphite of .... 5, 162  
 „ and Sodium, Iodide of .... 5, 163  
 „ and Sodium, Sulphate of.... 5, 163  
 „ and Sodium, Sulphide of.... 5, 162  
 „ and Strontium, Hyposulphite of.... 5, 164  
 „ and Tantalum, Fluoride of 5, 166  
 „ and Tin, alloys of .... 5, 179  
 „ and Tin, Amalgam of .... 6, 127  
 „ and Tin, Antimonide of .... 5, 180  
 „ Tin, and Bismuth, Amalgam of .... 6, 128  
 „ Tin, and Zinc, alloys of .... 5, 181  
 „ and Titanium, Fluoride of 5, 166  
 „ and Uranium, Acetate of ... 8, 320  
 „ and Zinc, alloy of .... 5, 179  
 „ and Zinc, Cyanide of .... 7, 428  
 „ and Zinc, Malate of .... 10, 224  
 „ and Zirconium, Silicate of 5, 166
- Leaden chamber crystals .... 2, 451  
 Leadhillite .... 5, 138  
 Leaf-green .... 17, 3  
 „ -red .... 17, 1  
 „ -yellow .... 16, 515  
 Leather, tanned .... 15, 473  
 Leaves, resinous yellow of .... 16, 515  
 „ wax of.... 18, 157  
 Leblanc's Soda process .... 3, 79  
*Lecanora Montagnei*, preparation of Erythroglucin from .... 12, 385  
 „ *tartarea*, preparation of Erythric acid from .... 12, 382  
 „ *tartarea*, preparation of Litmus from .... 12, 365  
 Lecanorate of Ethyl .... 12, 372  
 „ Methyl .... 12, 372



Lecanorates, metallic ....	12, 379	Lichenic or Lichenstearic acid....	16, 195
Lecanoric acid ....	12, 377	Lichenin ....	15, 119
Lecanorin ....	12, 377	„ formation of Dextroglu-	
Lecithine ....	16, 484; 18, 374	cose from ....	15, 308
Ledererite ....	3, 439	Lichen-red ....	12, 358
Leditannic acid....	15, 527	Lichens, occurrence of Usnic	
Ledum-camphor ....	14, 377	acid in ....	17, 48
<i>Ledum palustre</i> , Ericolin in ....	16, 28	Lichen-starch ....	15, 119
„ preparation of		Liebethenite ....	5, 419
„ Ericinol from	16, 29	Liebig's condenser ....	1, 288
„ volatile oil of....	16, 30	„ theory of fermenta-	
Legumin of almonds ....	18, 433	tion ....	7, 109
„ oats ....	18, 437	Liebigite ....	4, 190
„ peas, beans, &c. ....	18, 427	Light-absorbers ....	1, 193
Leidenfrost's Experiment ....	1, 277	Light, absorption of ....	1, 165
Leirochroite ....	5, 472	„ carburetted Hydrogen ....	7, 249
Lemery, Nicholas ....	1, 4	„ chemical effects of ....	1, 170
Lemon-camphor ....	14, 302	„ chemical relations of ....	1, 165
„ -juice, preparation of		„ and colour spectrum ....	1, 180
„ citric acid from ....	11, 437	„ crystallisation accompa-	
„ oil ....	14, 297	nied by ....	1, 15
„ oil, Hydrate of ....	14, 300	„ decompositions produced	
„ oil, Hydrochlorates of ....	14, 300	by ....	1, 172
Lenticular Grey Ironstone ....	5, 284	„ development of, accom-	
Lentils, composition of legumin		ppanying eremacausis ....	7, 92
from ....	18, 430	„ development of, after ex-	
Lenzinite, earthy ....	3, 416	posure to light ....	1, 193
Leonhardite ....	3, 446	„ development of, as a con-	
Lepargylic acid ....	13, 374	sequence of actual che-	
Lepidine ....	14, 103	mical combination ....	1, 181
<i>Lepidium sativum</i> , oil from the		„ development of, as a con-	
seeds of ....	16, 315	sequence of probable	
Lepidokrokite ....	5, 197	chemical combination....	1, 181
Lepidolite ....	3, 461	„ development of, by heat	
Lepidomelane ....	5, 287		1, 166, 169
Lerp-manna, preparation of Inu-		„ development of heat by	1, 165
lin from ....	15, 114	„ development of, by me-	
Lethal ....	15, 43	chanical force....	1, 202
Lettuce-fat ....	16, 274	„ development of, by pon-	
Leucates, metallic ....	15, 60—63	derable substances ....	1, 181
Leucazolitmin ....	12, 367	„ development of, unac-	
Leucene, Sulphide of ....	10, 394	panied by any al-	
Leucic acid ....	15, 536	teration in the ponder-	
Leucine ....	11, 425	able matter of bodies....	1, 193
„ copulated acid produced		„ double refraction of ....	1, 164
by, with nitric acid ....	7, 226	„ Drummond's....	2, 29
„ Hydrochlorate ....	11, 431	„ effect of, in assisting	
„ metallic compounds of	11, 432	eremacausis ....	7, 95
Leucite....	3, 438	„ effect of, on chloride of	
Leucoharmin, see Harmin.		silver ....	1, 173
Leucol ....	13, 243	„ effect of, in inducing the	
Leucopetrin ....	17, 444; 18, 244	combination of oxygen	
Leucophane ....	3, 411	with other bodies ....	2, 24
Leucorcein ....	12, 363	„ effect of, in inducing the	
Leucoturic acid ....	9, 444	decomposition of car-	
Levyne....	3, 441	bonic acid by the green	
Leyden Jar ....	1, 318	parts of plants ....	1, 172
Libavius ....	1, 4	„ effect of, on a mixture of	
„ fuming spirit of ....	5, 87	chlorine and hydrogen	1, 170

Light emitted by charcoal at the poles of the voltaic battery ....	1, 316	Ligustrin ....	16, 163
„ grey copper ....	5, 492	Ligustrone ....	16, 164
„ hydrochloric ether ....	8, 368	<i>Ligustrum vulgare</i> , colouring matter of the berries of ....	16, 530
„ influence of, on combination ....	1, 36	Likene ....	10, 411
„ influence of, on decomposition ....	1, 115	Lilac oil ....	14, 374
„ inflexion of ....	1, 164	<i>Lilium croceum</i> , wax from pollen of ....	18, 160
„ machine, Döbereiner's instantaneous....	2, 50, 57	„ <i>bulbiferum</i> and <i>chalcedonicum</i> , emission of light by the flowers of ....	1, 187
„ -magnets ....	1, 193	Lily of the Valley, camphor of ....	14, 378
„ memoirs relating to ....	1, 161	Limacin ....	18, 345
„ metals ....	3, 2	<i>Limax agrestis</i> , mucus of ....	18, 344
„ oil of coal-tar ....	11, 135	Lime ....	3, 181
„ oil of wine ....	13, 175	„ Acetate ....	8, 302
„ oil of wood-tar ....	15, 152	„ Acetate with Chloride of Calcium ....	8, 302
„ physical properties of ....	1, 163	„ Aconitates ....	11, 406
„ polarization of ....	1, 164	„ Alizarate ....	14, 140
„ produced by sudden compression of water ....	2, 62	„ Alloxanate ....	10, 164
„ radiation of ....	1, 164	„ Althionate ....	8, 432
„ -red silver ....	6, 188	„ Aluminate ....	3, 327
„ reflection of ....	1, 164	„ Amidobenzoate ....	12, 146
„ refraction of ....	1, 164	„ Amilate....	15, 100
„ relation of, to electricity ....	1, 167	„ Amydalate ....	15, 429
„ relation of, to heat ....	1, 165	„ Amylomalate ....	11, 80
„ relation of, to magnetism ....	1, 167	„ Amylosulphate ....	11, 57
„ relations of, to organic compounds ....	7, 64	„ Amylosulphite ....	11, 53
„ relations of, to ponderable bodies....	1, 170	„ Amyloxalate ....	11, 73
„ sudden emission of, by certain yellow flowers....	1, 187	„ Anacardate ....	17, 521
„ and Heat, cause of the development of, in combustion ....	2, 36	„ Angelate ....	10, 415
„ and Heat, development of, in the combination of oxygen with other bodies....	2, 27	„ Anisate....	13, 126, 585
„ and Heat, relations between ....	1, 165	„ Anthranilate ....	12, 329
„ and Heat, theories of the relation between ....	1, 167	„ Antimoniate ....	4, 389
Lignin ....	15, 148	„ Antimonite ....	4, 389
Lignite, distillation of ....	15, 154	„ Antitartrate ....	10, 368
„ formation of ....	15, 158	„ Apoglucate ....	13, 366
„ humous substances from ....	17, 476	„ Arabate....	15, 202
„ resins from ....	17, 437	„ Arseniate ....	4, 304
„ of Weissenfels, resins from....	17, 443	„ Arsenite ....	4, 302
Ligno-humic acid ....	17, 474	„ with Asparagine ....	10, 246
Lignoïn ....	15, 484	„ Aspartate ....	10, 235
Lignone ....	9, 41	„ Arachidate ....	17, 371
„ products of decomposition of ....	9, 47	„ Atropate ....	16, 549
Lignosulphates ....	15, 164	„ Aurate with Chloride of Calcium ....	6, 234
		„ Benzoate ....	12, 39
		„ Benzoglycolate ....	12, 67
		„ Biethylophosphate ....	8, 402
		„ Bimethylophosphate ....	12, 483
		„ Binitroethylate ....	12, 557
		„ Binitrophloretate ....	13, 333
		„ Bisulphohydrokinovate....	16, 242
		„ Bisulphometholate ....	12, 484
		„ with blue oxide of Iridium ....	6, 391
		„ Borate ....	3, 189
		„ Borate and Silicate ....	3, 392

Lime, Bromacetate ....	12, 533	Lime, Hydrosulphite ....	3, 198
„ Bromate ....	3, 206	„ Hyoglycocholate ....	18, 105
„ Butyrate ....	10, 86	„ Hypobromite ....	3, 205
„ Caincate ....	18, 145	„ Hypochlorite ....	3, 208
„ Campholate ....	14, 454	„ Hypophosphite ....	3, 190
„ Camphorate ....	14, 460	„ Hyposulphate ....	3, 200
„ Caprate ....	14, 488	„ Hyposulphite ....	3, 199
„ Caproate ....	11, 417	„ Insolinate ....	13, 320
„ Carbobenzoate ....	12, 48	„ Iodate ....	3, 204
„ Carbolate ....	11, 152	„ Iodide ....	3, 203
„ Carbonates ....	3, 185	„ Isobiglycolethylenate ....	15, 235
„ Carbonate of, with Sul-		„ Isotartrate ....	10, 332
phate of Soda ....	3, 217	„ Itaconate ....	10, 426
„ Chelidonate ....	12, 417	„ Kinate ....	16, 229
„ Chlorate ....	3, 212	„ with Kinovin ....	18, 29
„ Chloride ....	2, 300 ; 3, 208	„ Lactate ....	11, 482
„ Chlorobenzoate ....	12, 114	„ Lactate, with Chloride	
„ Chlorocinnamate ....	13, 296	of Calcium ....	11, 484
„ Cholate ....	18, 51	„ Leucate ....	15, 61
„ Cholesterate ....	13, 159	„ Linoleate ....	16, 307
„ Chromate ....	4, 153	„ -liver of sulphur ....	3, 197
„ Chrysammate ....	12, 5	„ with Magnesia ....	3, 253
„ Cimicate ....	16, 285	„ Malate ....	10, 216
„ Cinnamate ....	13, 275	„ Maleates ....	8, 156
„ Citraconate ....	10, 421	„ Mannitate ....	15, 383
„ Citrates ....	11, 450, 451	„ Margarate ....	16, 362
„ Comenate ....	11, 386	„ Meconate ....	12, 428
„ Convolvulate ....	16, 158	„ Mercurate ....	6, 107
„ Copaivate ....	17, 327	„ Mesaconate ....	10, 430
„ Crenate ....	17, 468	„ Mesitylo-sulphate ....	9, 29
„ Croconate ....	10, 392	„ Metaphosphate ....	3, 196
„ with Cupric oxide ....	5, 463	„ Metatartrate ....	10, 329
„ Cyanate ....	8, 68	„ Methylobithionate ....	12, 488
„ Cyanurate ....	9, 454	„ Molybdate ....	4, 76
„ Diphosphate ....	3, 194	„ Mucate ....	11, 507
„ Diphosphite ....	3, 191	„ Naphthionate ....	14, 113
„ Ellagate ....	16, 189	„ Nicolate ....	5, 386
„ Ethionate ....	8, 434	„ Nitranisate ....	13, 138, 586
„ Ethylophosphate ....	8, 401	„ Nitrate ....	3, 214
„ Ethylosulphite ....	8, 409	„ Nitrate, alcoholate of ....	8, 267
„ Eugenate ....	14, 206	„ Nitrate, compound of, with	
„ -flower oil ....	14, 378	Urea ....	7, 373
„ with Fluxes ....	3, 216	„ Nitrite ....	3, 213
„ Formiate ....	7, 278	„ Nitrobenzoate ....	12, 125
„ Fulminurate ....	10, 560	„ Nitrohippurate ....	12, 131
„ Fumarate ....	10, 27	„ Nitrotoluylate ....	13, 23
„ Gallate ....	12, 406	„ Oleate ....	17, 71
„ Glucate ....	13, 239	„ Oil of ....	14, 304
„ Glycerate ....	13, 571	„ Osmiate ....	6, 421
„ Glycocholate ....	18, 60	„ Oxalate ....	13, 517
„ Glycolate ....	12, 507 ; 13, 436	„ Oxalates ....	9, 130
„ Glyoxylate ....	12, 507 ; 13, 435	„ Oxalate, with Chloride of	
„ Gurgunate ....	17, 546	Calcium ....	9, 132
„ Hippurate ....	12, 78	„ Oxamate ....	13, 536
„ Hyæenate ....	18, 107	„ Oxurate ....	10, 170
„ Hydrate ....	3, 182	„ Palladite ? ....	6, 355
„ Hydrate, electrolysis of ....	1, 458	„ Pectate ....	15, 407
„ Hydraulic ....	3, 391	„ Pelargonate ....	13, 370
„ Hydropiperate ....	15, 13	„ Perchlorate ....	3, 212



Lime, Periodate....	....	3, 204	Lime, Sulphosalicylate ....	....	12, 279
„ Permanganate ....	....	4, 242	„ Sulphosuccinate ....	....	10, 131
„ Permesitylo-sulphate ....	....	9, 30	„ Sulphovinate ....	....	8, 423
„ Phloretate ....	....	13, 311	„ Superphosphate ....	....	3, 196
„ Phosphates ....	....	3, 192	„ Sylvate ....	....	17, 320
„ Phosphuret ....	....	3, 189	„ Tannate ....	....	15, 466
„ Phthalate ....	....	13, 13	„ Tantalate ....	....	4, 11
„ Picrate ....	....	11, 222	„ Tartramate ....	....	10, 344
„ Piperate ....	....	15, 10	„ Tartrate ....	....	10, 288
„ Platinat....	....	6, 328	„ Tartrelate ....	....	10, 336
„ Plumbite....	....	5, 164	„ Tartromethylate ....	....	10, 339
„ poor and rich ....	....	3, 390	„ Tartrovinat ....	....	10, 342
„ and Potash, Chelidonate....	....	12, 418	„ Tellurate....	....	4, 424
„ Propionate ....	....	9, 406; 10, 555	„ Tellurites ....	....	4, 424
„ pure or fat, with Cement	....	3, 390	„ Terchloracetate ....	....	9, 212
„ Purpurate ....	....	10, 198	„ Terebentilate ....	....	13, 119
„ Pyromeconate ....	....	10, 441	„ Thiacetate ....	....	13, 449
„ Pyromucate ....	....	10, 385	„ Thionaphthamate ....	....	14, 117
„ Pyrophosphate ....	....	3, 196	„ Titanate and Silicate ....	....	3, 488
„ Pyrotartrate ....	....	11, 91	„ Tungstate ....	....	4, 44
„ Racemate ....	....	10, 353	„ Triphosphate ....	....	3, 192
„ Rhodiate....	....	6, 367	„ „ with chlo-		
„ Rhodizonate ....	....	10, 402	ride or fluoride of cal-		
„ Ricinelaideate ....	....	17, 136	cium ....	....	3, 219
„ Ricinoleate ....	....	17, 134	„ Uranate ....	....	4, 190
„ Roccellate ....	....	16, 476	„ Urate ....	....	10, 475
„ Rubianate ....	....	16, 41	„ Uroxanate ....	....	10, 479
„ Saccharates ....	....	11, 518	„ Valerate ....	....	11, 33
„ Salicylamate ....	....	12, 322	„ Vanadiates ....	....	4, 102
„ Salicylate ....	....	12, 252	„ -water ....	....	3, 183
„ Salicylurate ....	....	12, 332	„ Xanthate....	....	8, 456
„ -saltpetre....	....	3, 214	„ Zirconate....	....	3, 349
„ -salts ....	....	3, 183	„ and Ammonia, arseniate of	....	4, 306
„ Santalate ....	....	16, 261	„ „ malate of....	....	10, 219
„ Sarcolactate ....	....	11, 500	„ and Baryta, butyrate of....	....	10, 86
„ Sebate ....	....	14, 498	„ „ carbonate of	....	3, 218
„ Selenite ....	....	3, 203	„ „ compound of	....	3, 218
„ Silicates ....	....	3, 388	„ „ sulphate of ....	....	3, 218
„ Silicate, with silicate of			„ and Cadmic oxide, hypo-		
alumina ....	....	3, 420	phosphite of ? ....	....	5, 64
„ solubility of, in aqueous			„ and Cerous oxide, car-		
glycerin ....	....	13, 568	bonate of ....	....	3, 274
„ Stannate....	....	5, 100	„ and Cobalt-oxide, hypo-		
„ Stearate ....	....	17, 111	phosphate of ....	....	5, 344
„ Styphnate ....	....	11, 233	„ and Cupric oxide, acetate		
„ Suberate ....	....	13, 209	of ....	....	8, 328
„ Succinate ....	....	10, 119	„ and Ferric oxide, arseniate		
„ Sucrates ....	....	15, 285, 539	of ....	....	5, 309
„ Sulphate ....	....	3, 200	„ and Ferric oxide, hypo-		
„ „ with fluoride of			sulphite of ....	....	5, 274
calcium....	....	3, 220	„ and Glucina, silicate of ....	....	3, 411
„ Sulphetherate ....	....	10, 520	„ and Lead-oxide, carbonate		
„ with Sulphide of Calcium	....	3, 219	of ....	....	5, 164
„ Sulphindigotate ....	....	13, 64	„ and Lead-oxide, phosphate		
„ Sulphite ....	....	3, 199	of, with chloride of lead	....	5, 164
„ Sulphocamphorate ....	....	13, 380	„ and Lead-oxide, hyposul-		
„ Sulphocaprylate ....	....	13, 197	phite of....	....	5, 164
„ Sulphocymenate ....	....	14, 191	„ and Magnesia, arseniate of	....	4, 308
„ Sulphophloretate....	....	13, 314	„ „ carbonate of	....	3, 253

Lime and Magnesia, hydrated				Lipic acid ....	10, 434
borate of	3, 254			Liquefaction of gases, produced	
"    "    nitrate of	3, 254			by the affinity	
"    "    silicates of	3, 401			of ponderable	
" and Mercuric oxide, hypo-				bodies for the	
sulphite of ....	6, 107			ponderable	
" and Potash, chromate of...	4, 154			base of the gas	1, 289
"    "    lactate of ....	11, 484			"    gases by ex-	
"    "    malate of ....	10, 219			ternal pressure	
"    "    phosphate of	3, 215			and cooling ....	1, 285
"    "    silicate of ....	3, 393			"    solids ....	1, 253
"    "    sulphate of ....	3, 215			Liquid bodies, solution of, in	
"    "    tartrate of ....	10, 289			water ....	2, 69
" and Silver-oxide, hyposul-				"    compounds, table of	
phite of....	6, 181			specific heats of ....	1, 244
" and Soda, carbonate of ....	3, 215			"    phosphide of hydrogen	2, 148
"    "    lactate of ....	11, 485			<i>Liquid-ambar Altingia</i> , liquid	
"    "    malate of ....	10, 219			storax obtained from	17, 391
"    "    silicate of ....	3, 394			Liquids, adhesion between ....	1, 27
"    "    sulphate of ....	3, 217			"    cohesion of ....	1, 7
"    "    tartrate of ....	10, 290			"    compressibility of ....	1, 257
" and Strontia, acetates of,				"    dielectric properties of	1, 313
with the uranic acetates	8, 308			"    diffusion of ....	1, 28
" and Strontia, carbonate of	3, 219			"    electric conducting	
"    "    compound of	3, 219			powers of ....	1, 311
" and Tantallic acid, hydro-				"    expansion of, by heat	1, 225
fluatc of ....	4, 11			"    formation of ....	1, 252
" and Uranic oxide, car-				"    heat-conducting powers	
bonate of ....	4, 190			of ....	1, 223
" and Uranic oxide, phos-				"    organic, circular polari-	
phate of ....	4, 191			sation in ....	7, 64
" and Uranic oxide, sul-				"    organic, refracting	
phate of ....	4, 191			power of ....	7, 64
" and Zirconia, silicate of ....	3, 463			"    regarded as formed by	
Limestone ....	3, 185			combination of heat	
"    artificial ....	3, 392			with ponderable	
"    mixtures of, with				bodies ....	1, 252
siliceous substances	3, 391			"    rendered phosphores-	
Lime-water ....	3, 183			cent by compression	1, 205
Limettic acid ....	14, 519			"    specific heat of, accord-	
Limonin ....	17, 546			ing to Favre and	
Limonite ....	5, 225			Silbermann ....	1, 248
Linaracrin ....	18, 231			"    specific heat of, accord-	
Linaresin ....	18, 231			ing to Regnault ....	1, 247
Linarin....	18, 231			"    spheroidal state of	
Linen, action of strong nitric				(Leidenfrost's ex-	
acid on ....	15, 135			periment) ....	1, 277
"    preparation of dextro-				"    and Solids, adhesion	
glucose from ...	15, 312			between ....	1, 27
Lines of magnetic force ....	1, 168			"    and Solids, relations	
Liniment ....	7, 244			between the specific	
Linin ....	18, 231			gravities and atomic	
Linoleates ....	16, 307			weights of ....	1, 54, 68
Linoleic acid ....	16, 305			<i>Liquor anodynus mineralis</i> ,	
Linseed mucilage ....	15, 210			<i>Hofmanni</i> ....	8, 273
"    -oil ....	16, 308			" <i>cornu cervi succinatus</i>	10, 115
"    "    composition of ....	7, 237			" <i>fumans Boylei</i> ....	2, 454
"    "    decoloration of, in				" <i>nitri fixi</i> ....	3, 22
sunshine ....	7, 96			" <i>silicum</i> ....	3, 370

Liquorice-root, preparation of	Lithium	3, 122
Asparagine from....	" -amalgam	6, 105
10, 241	" Chloride	3, 130
" preparation of	" Chloro-aurate	6, 233
Glycyrrhizin	" Fluoride	3, 131
from....	" Iodide	3, 130
17, 57	" Peroxide	3, 127
Liriodendrin	" Persulphide	3, 129
18, 232	" Platinoses quicyanide	12, 499
Liroconite	" salts, solubility of, in	
5, 473	alcohol	8, 266
Litharge	" Sulpharsenate	4, 299
5, 106—109	" Sulpharsenite	4, 299
Lithia	" Sulphide	3, 128
3, 122	" Sulphomolybdate	4, 74
" Acetate	" Sulphotellurate	4, 423
8, 300	" and Aluminum, fluo-	
" Alum	ride of	3, 327
3, 326	" and Arsenic, compound	
" Benzoate	of	4, 299
12, 39	" and Boron, fluoride of	3, 131
" Borate	" and Carbon, sulphide	
3, 128	of	3, 129
" Bromate	" and Hydrogen, fluoride	
3, 130	of	3, 131
" Carbonate	" and Hydrogen, sulphide	
3, 127	of	3, 128
" Chlorate	" and Silicium, fluoride	
3, 131	of	3, 387
" Chromate	" and Sodium, compound	
4, 153	of	3, 132
" Citrate	Lithofellic acid	17, 375
11, 448	Lithomarge	3, 417
" crystallised	Litmus, preparation of	12, 365
3, 126	" preparation of colouring	
" Fulminurate	matters from	12, 363
10, 560	Liver of Antimony	4, 355, 378, 383
" Hyposulphate	" Sulphur	3, 35, 97
3, 129	" Sulphur, volatile	2, 454
" Iodate	Lobeline	18, 198
3, 130	Lobsters, colouring matter of	18, 420
" Malate	Logwood, preparation of Hæma-	
10, 214	toxylin from	16, 287
" Mucate	Loliin	18, 233
11, 506	Lomonite	3, 440
" Nitrate	Lopez-root, resins of the bark of	17, 450
3, 131	Lophine	12, 199
" Oxalates	" with Bichloride of Pla-	
13, 515; 9, 127	tinum	12, 203
" Perchlorate	" with Nitrate of Silver	12, 203
3, 131	" Salts of	12, 201
" Periodate	Luchs-sapphire	3, 434
3, 130	Luna, syn. of Silver	6, 132
" Permanganate	Luna cornea	6, 162
4, 241	Lunar caustic	6, 170
" Phosphate	Lumbricus terrestris, phospho-	
3, 128	rescence of	1, 185
" Rhodizonate	Lumen philosophicum	2, 58
10, 401	Luminosity	1, 181
" Salts		
3, 126		
" Selenite		
3, 130		
" Silicate of, with Silicate		
of Alumina		
3, 420		
" Solution		
3, 126		
" Sulphate		
3, 129		
" Sulphite		
3, 129		
" Sulphovinate		
8, 421		
" Tartrate		
10, 285		
" Tellurates		
4, 423		
" Tellurites		
4, 422		
" Tungstate		
4, 42		
" Urate		
10, 473		
" Vanadate		
4, 101		
" and Alumina, phosphate		
of		
3, 326		
" and Alumina, sulphate of		
3, 326		
" and Ammonia, phosphate		
of		
3, 132		
" and Ammonia, sulphate of		
3, 132		
" and Potash, tartrate of		
10, 285		
" and Soda, phosphate		
3, 132		
" and Soda, tartrate of		
10, 285		
" -mica		
3, 461		
" -tourmaline		
3, 455		
Lithic acid		
10, 456		
Lithio-antimonie Tartrate		
10, 307		



Luminous appearances accom- panying crystallisa- tion ....	1, 206	Lutidine ....	12, 337
Lump-fish, colouring matter of	18, 421	<i>Lycoperdon cervinum</i> , resin of...	17, 450
Lupinin ....	18, 233	Lycopodium-bitter ....	16, 98
Lutein ....	18, 413	Lycoctonine ....	18, 178
Luteohæmatoïdin ....	18, 413	Lycopin ....	18, 233
Luteolin ....	15, 28	Lycopodium, bitter ....	15, 346
		Lycosin ....	16, 99
		Lycostearone ....	16, 98

## M.

Mace oil ....	14, 390	Magnesia, Aluminate of, with Sili- cate of Magnesia ....	3, 462
Madder-borncene from madder fusel-oil ....	14, 314	„ Amidobenzoate ....	12, 146
„ compounds produced by decomposition of the glucosides of, or exist- ing ready formed in ....	16, 47	„ Amylosulphate ....	11, 58
„ preparation of Alizarin from ....	14, 133 ; 16, 33	„ Arachidate ....	17, 371
„ preparation of Purpurin from ....	13, 326	„ Arseniate ....	4, 307
„ preparation of Ruberyth- ric acid from....	16, 42	„ Arsenite ....	4, 307
„ preparation of Rubiacin from ....	16, 48	„ Aspartate ....	10, 236
„ preparation of Rubiacin, Rubiretin, and Veran- tin from ....	16, 34	„ Aurate ....	6, 234
„ preparation of Rubiagin from ....	16, 54	„ Aurate, with Chloride of Magnesium ....	6, 235
„ preparation of Rubian from ....	16, 33	„ Azelaate ....	17, 81
„ preparation of Rubianic acid from ....	16, 39	„ with Baryta? ....	3, 253
„ preparation of Rubichlo- ric acid from....	16, 66	„ Benzoate ....	12, 39
„ -purple....	13, 325	„ Benzoglycolate ....	12, 67
„ -red, extractive or resin- ous, <i>see</i> Alizarin.		„ Biethylophosphate ....	8, 402
„ root, Tannic acid from....	15, 532	„ Bi-hydroseleniate? ....	3, 239
„ substances existing ready- formed in ....	16, 33	„ Bimethylophosphate ....	12, 483
„ -yellow....	16, 69	„ Binitroethylate ....	12, 557
<i>Madia sativa</i> , oil from the seeds of ....	16, 315	„ Borates ....	3, 230
Madic acid ....	16, 365	„ Bromate ....	3, 241
Mafurra tallow....	16, 393	„ Butyrate ....	10, 86
<i>Magisterium Bismuthi</i> ....	4, 440	„ Camphorate ....	14, 460
„ <i>Plumbi</i> ....	5, 145	„ Caprate ....	14, 488
<i>Magistrat</i> ....	6, 134	„ Caproate ....	11, 418
Magnesia ....	3, 222	„ Carbonates ....	3, 226
„ Acetate ....	8, 303	„ Chelidonate ....	12, 418
„ <i>alba</i> ....	3, 227	„ Chlorate ....	3, 243
„ Alloxanate ....	10, 165	„ Chromate ....	4, 154
„ -alum....	3, 329	„ Chromite ....	4, 154
„ Aluminate ....	3, 328	„ Chrysammate ....	12, 5
		„ Cinnamate ....	13, 275
		„ Citraconate ....	10, 421
		„ Citrates ....	11, 451
		„ Cobaltite ....	5, 345
		„ Comenate ....	11, 386
		„ Crenate ....	17, 468
		„ Croconate ....	10, 392
		„ Ethylosulphite ....	8, 410
		„ Eugenate ....	14, 206
		„ Euxanthate ....	17, 534
		„ Fulminurate ....	10, 560
		„ Formiate ....	7, 278
		„ Fumarate ....	10, 27
		„ Gallate ....	12, 407, 408
		„ Gambodate ....	17, 418

Magnesia, Hippurate ....	12, 78	Magnesia, Salicylamate ....	12, 322
„ Hydrate ....	3, 223	„ Salicylate ....	12, 252
„ Hydrate, Electrolysis		„ Salicylite ....	12, 242
of ....	1, 458	„ Seleniate ....	3, 240
„ Hydrochlorate and		„ Selenites ....	3, 240
Stannite ....	5, 100	„ Selenocyanide ....	8, 123
„ Hydrofluorate of Borate		„ Silicate, with Alumi-	
of ....	3, 243	nate of Magnesia ....	3, 462
„ Hypobromite ....	3, 241	„ Silicate, with Fluo-	
„ Hypochlorite ....	3, 243	ride of Magnesium ....	3, 401
„ Hypo-iodite ? ....	3, 240	„ Silicate, with Silicate	
„ Hypophosphite ....	3, 232	of Alumina ....	3, 420
„ Hyposulphate ....	3, 235	„ Silicates ....	3, 395
„ Hyposulphite ....	3, 235	solution ....	3, 224
„ Iodate ....	3, 240	„ Stannate ....	5, 100
„ Itaconate ....	10, 426	„ Stearate ....	17, 111
„ Kinate ....	16, 330	„ Styphnate ....	11, 233
„ Lactate ....	11, 485	„ Suberate ....	13, 209
„ Leucate ....	15, 61	„ Sucrate ....	15, 288
„ Linoleate ....	16, 308	„ Sulphate ....	3, 236
„ Malate ....	10, 219	„ Sulphindigotate ....	13, 64
„ Maleates ....	8, 157	„ Sulphite ....	3, 235
„ Mandelate ....	12, 59	„ Sulphophloretate ....	13, 314
„ Meconate ....	12, 428	„ Sulphosalicylate ....	12, 279
„ Mellitate ....	10, 6	„ Sulphovinate ....	8, 424
„ Metatartrate ....	10, 329	„ Sylvate ....	17, 321
„ Methylobithionate ....	12, 489	„ Tannate ....	15, 466
„ Molybdate ....	4, 77	„ Tartrate ....	10, 290
„ Mucate ....	11, 507	„ Tellurates ....	4, 424
„ Myristate ....	16, 213	„ Tellurite ....	4, 424
„ Niccolate ....	5, 386	„ Thiacetate ....	13, 449
„ <i>nigra</i> ....	4, 195	„ Thionaphthamate ....	14, 117
„ Nitrate ....	3, 244	„ Tungstate ....	4, 45
„ Nitrate, Alcoholate of	8, 268	„ Uranate ....	4, 192
„ Nitrate, compound of		„ Urate ....	10, 476
urea with ....	7, 373	„ <i>usta</i> v. <i>calcinata</i> ....	3, 222
„ Nitrite ....	3, 243	„ Valerate ....	11, 33
„ Nitrocinnamate ....	13, 301	„ Vanadiates ....	4, 102
„ Nitrohippurate ....	12, 131	„ and Alumina, phosphate	
„ Oleate ....	17, 72	of ....	3, 328
„ Oxalate ....	13, 518; 9, 132	„ „ sulphate of	3, 329
„ Oxamate ....	13, 536	„ and Ammonia, arseni-	
„ Palmitate ....	16, 362	ate of ....	4, 307
„ Perchlorate ....	3, 243	„ and Ammonia, borate	
„ Permanganate ....	4, 242	of ....	3, 245
„ Phloretate ....	13, 311	„ and Ammonia, car-	
„ Phosphates ....	3, 232	bonate of ....	3, 244
„ Phosphite ....	3, 232	„ and Ammonia, hypo-	
„ Picrate ....	11, 222	sulphite of ....	3, 247
„ Piperate ....	15, 10	„ and Ammonia, meta-	
„ Propionate ....	10, 555	phosphate of ....	3, 247
„ Purpurate ....	10, 198	„ and Ammonia, nitrate	
„ Pyromeconate ....	10, 442	of ....	3, 248
„ Pyrotartrate ....	11, 91	„ and Ammonia, oxalate	
„ Racemate ....	10, 354	of ....	9, 132
„ Rhodizonate ....	10, 402	„ and Ammonia, phos-	
„ Ricinoleate ....	17, 134	phate of ....	3, 245
„ Roccellate ....	16, 477	„ and Ammonia, phos-	
„ Saccharates ....	11, 519	phite of ....	3, 245

Magnesia and Ammonia, sulphate				Magnesium, Chloride, with aurate	
of ....	3,	248		of magnesia ....	6, 235
„ and Ammonia, sulphite				„ Chloride, with cya-	
of ....	3,	247		nide of mercury ....	8, 23
„ and Cupric oxide, sul-				„ Chloro-aurate ....	6, 235
phate of ....	5,	463		„ Chloropalladite ....	6, 355
„ Cupric oxide, and Am-				„ Chloroplatinate ....	6, 330
monia, sulphate of ....	5,	463		„ Chlorostannate ....	5, 100
„ and Ferroso-ferrie ox-				„ Chromate of chloride	
ide, sulphate of ....	5,	274		of ....	4, 154
„ and Ferrous oxide,				„ Cyanide....	7, 417 ; 12, 495
carbonate of ....	5,	271		„ Ferricyanide ....	7, 485
„ and Lime, arseniate of	4,	308		„ Ferrocyanide ....	7, 484
„ „ carbonate of	3,	253		„ Fluoride ....	3, 243
„ „ compound of	3,	253		„ Fluoride, with sili-	
„ „ hydrated				cate of magnesia....	3, 401
„ „ borate of	3,	254		„ Hydrated Protiodide	3, 240
„ „ nitrate of....	3,	254		„ Hyposulpharsenite	4, 307
„ „ silicates of	3,	401		„ Mellonide ....	9, 393
„ and Nickel-oxide, phos-				„ Naphthionate ....	14, 113
phate ....	5,	386		„ Oxide ....	3, 222
„ and Potash, borate of	3,	249		„ Platinocyanide	
„ „ carbonate					8, 53 ; 10, 509
of ....	3,	249		„ Platino-platinidey-	
„ „ chromate				anide ....	8, 54
of ....	4,	154		„ Selenide ? ....	3, 239
„ „ compound				„ Sulphantimoniate....	4, 390
of ? ....	3,	249		„ Sulpharsenite ....	4, 307
„ „ hyposul-				„ Sulphide ....	3, 234
phite of	3,	249		„ Sulphocyanide ....	8, 85
„ „ succinate				„ „ with	
of ....	10,	122		cyanide of mercury	8, 96
„ „ sulphate of	3,	250		„ Sulphomolybdate ....	4, 77
„ „ tartrate of	10,	291		„ Sulphotellurite ....	4, 425
„ and Soda, borate of ....	3,	251		„ Sulphotungstate ....	4, 45
„ „ carbonate of	3,	251		„ and Ammonium,	
„ „ compound				chloride of ....	3, 248
of ? ....	3,	251		„ and Ammonium,	
„ „ metaphos-				ferrocyanide of ....	7, 485
phate of	3,	252		„ and Ammonium,	
„ „ pyrophos-				sulpharseniate of....	4, 308
phate of	3,	252		„ and Carbon, sulphide	
„ „ sulphate of	3,	253		of ....	3, 239
„ „ tartrate of	10,	291		„ and Copper, sulphide	
„ and Uranic Oxide, ace-				of ....	5, 463
tate of ....	8,	308		„ and Ethylamine,	
„ and Urea, tartrate of	13,	405		phosphate of ....	13, 480
„ and Zinc-oxide, sul-				„ and Hydrogen, hy-	
phate of ....	5,	46		drated sulphide of	3, 235
Magnesian-chromic Oxalate	9,	143		„ and Iodine, chloride	
„ -uranic Acetate	13,	444		of ....	3, 243
Magnesite	3,	229		„ and Iron, alloy of....	5, 274
Magnesium	3,	221		„ and Mercury, bro-	
„ alloys	3,	254		mise of ....	6, 109
„ Bromide	3,	240		„ and Mercury, chlo-	
„ Bromo-aurate	4,	234		ride of ....	6, 109
„ Bromoplatinate	6,	329		„ and Mercury, iodide of	6, 108
„ Chloride	3,	241		„ and Potassium, ferro-	
„ „ alcoholate of	8,	268		cyanide of ....	7, 486



Magnesium and Potassium, hy-			Malate of Lime	....	....	10, 216
drated bromide of	3, 250		„ Lime, preparation of			
„ and Potassium, hy-			Succinic acid by			
drated chloride of	3, 250		fermentation of	....	10, 113	
„ and Silicium, fluoride			„ Lime and Ammonia	10, 219		
of	....	3, 400	„ Lime and Potash	....	10, 219	
„ and Sodium, chloride			„ Lime and Soda	....	10, 219	
of	....	3, 253	„ Lithia	....	10, 214	
„ and Titanium, fluo-			„ Magnesia	....	10, 219	
ride of	....	3, 487	„ Manganese	....	10, 220	
Magnetic condition of all matter	1, 514		„ Mercuric	....	10, 226	
„ curves	....	1, 168	„ Mercurous	....	10, 225	
„ and diamagnetic con-			„ of Methyl	....	10, 227	
ditions of matter;			„ Piperidine	....	10, 449	
are they distinct or			„ Potash	....	10, 214	
merely relative?	....	1, 516	„ Silver	....	10, 226	
„ effects of the electric			„ Soda	....	10, 214	
current	....	1, 317	„ Strontia	....	10, 215	
„ Iron-ore, manganiferous	5, 300		„ Tin	....	10, 222	
„ Oxide of iron	....	5, 190	„ Uranium	....	10, 220	
„ Pyrites	....	5, 230	„ Yttria	....	10, 220	
Magnetisation (supposed) of steel			„ Zinc	....	10, 221	
by exposure to the violet rays			„ Zinc and Ammonium	10, 222		
of the solar spectrum	....	1, 167	Malates, general properties of	....	10, 213	
Magnetism, note on	....	1, 514	Maleates of Ammonia	....	8, 151	
„ relation of, to light	1, 167		„ Baryta	....	8, 155	
„ supposed influence of,			Maleate of Copper	....	8, 159	
on crystallisation	....	1, 514	„ Ferric	....	8, 158	
Magneto-electricity	....	1, 318	„ of Lead	....	8, 158	
Magneto-electric machine	....	1, 318	Maleates of Lime	....	8, 156	
Magnium, syn. with Magnesium	3, 221		Maleates of Magnesia	....	8, 157	
Magnus's determinations of the			Maleate, Mercurous	....	8, 159	
maximum tension of			„ of Nickel	....	8, 158	
aqueous vapour	....	1, 263	Maleates of Potash	....	8, 154	
experiments on the			Maleate of Potash and Soda?	....	8, 155	
expansion of gases			„ Silver	....	8, 159	
by heat	....	1, 224	„ Soda	....	8, 154	
green platinum salt	6, 304		„ Strontia	....	8, 156	
Maillechort	....	5, 497	„ Zinc	....	8, 158	
Maize fibrin	....	18, 441	Maleic acid	....	8, 151	
„ -seed, fat of	....	16, 393	„ solubility of, in al-			
Malacca tin	....	5, 67	cohol	....	8, 273	
Malachite	....	5, 414	Malic acid, acids perhaps identi-			
Malamate (Aspartate?) of Ethyl	10, 239		cal with	....	10, 227	
Malamide	....	10, 249	„ decompositions of	....	10, 211	
Malanil	....	11, 319	„ formation of, from			
Malanilic acid	....	11, 320	Asparagin and As-			
Malanilide	....	11, 368	partic acid	....	10, 207	
Malate of Alumina	....	10, 220	„ history, sources of	....	10, 205	
„ Ammonia	....	10, 213	„ preparation of, from			
„ Baryta	....	10, 215	apples	....	10, 211	
„ Cupric	....	10, 224	„ preparation of, from			
„ Cupric, with Sulphate of			cherries or ber-			
Ammonia	....	10, 225	berries	....	10, 210	
„ of Ethyl	....	10, 227	„ preparation of, from			
„ Ferric	....	10, 224	houseleek	....	10, 210	
„ of Lead	....	10, 223	„ preparation of, from			
„ Lead and Ammonium	10, 224		mountain-ash ber-			
„ Lead and Zinc	....	10, 224	ries	....	10, 208	

Malic acid, preparation of, from the berries of <i>Rhus</i> <i>coriaria</i> ....	10, 211	less than 2 at. oxy- gen to 1 at. man- ganese ....	4, 203
„ preparation of, from rhubarb-stalks ....	10, 211	Manganese ores principally con- taining hydrated	
„ properties of ....	10, 211	peroxide ....	4, 208
Malleable iron ....	5, 205	„ Oxysulphide ....	4, 219
Maloil ....	14, 408	„ Peroxide ....	4, 205
Malomethylic acid ....	10, 227	„ Peroxide, preparation of oxygen from ....	2, 21
Malonates ....	13, 561	„ Peroxide, with Cu- pric oxide....	5, 468
Malonic acid ....	13, 560	„ Peroxide, with Pro- toxide of Cobalt ....	5, 347
Malovinic acid ....	10, 227	„ Persulphomolybdate	4, 247
Malthacite ....	3, 419	„ Phosphide ....	4, 214
Maltin ....	18, 455	„ Protiodide, with Hy- driodate of Man- ganous oxide ....	4, 226
Maltose ....	15, 338	„ Salts, Electrolysis of	1, 463
„ formation of Dextroglu- cose from ....	15, 309	„ separation of, from Cobalt ....	5, 321
Malyl and Phenyl, nitride of ....	11, 319	„ Sesquioxide ....	4, 204
Mandarin, oil of ....	14, 304	„ Silicate of Protoxide of, with Silicate of Alumina....	3, 420
Mandelates ....	12, 58	„ soft ....	4, 205
Mandelic acid ....	12, 57	„ -spar ....	4, 213
Manganate of Baryta ....	4, 241	„ Sulpharsenate ....	4, 315
„ Potash ....	4, 233	„ Sulphides ....	4, 218
„ Soda ....	4, 238	„ Tantalide ....	4, 246
„ Strontia....	4, 242	„ Terchloride? ....	4, 229
Manganates, general properties of	4, 209	„ and Carbon of Sul- phide ....	4, 225
Manganese ....	4, 194	„ and Copper, alloy of	5, 468
„ Alloys ....	4, 248	„ and Gold, alloy of....	6, 237
„ -amalgam ....	6, 115	„ and Iron, Carbide of	5, 301
„ Amylosulphate ....	11, 59	„ and Iron, Cyanides of ....	7, 488
„ Argentocyanide ....	8, 31	„ and Mercury, Bro- mide of ....	6, 116
„ Arsenide ....	4, 314	„ and Mercury, Chlo- ride of ....	6, 116
„ Aurocyanide ....	8, 42	„ and Potassium, Fer- rocyanide of ....	7, 488
„ black oxide....	4, 204	„ and Potassium, Flu- oride of ....	4, 238
„ -blende ....	4, 218	„ and Potassium, Sul- phide of ....	4, 237
„ Bromide ....	4, 227	„ and Sodium, Fluo- ride of ....	4, 240
„ Bromo-aurate ....	6, 237	„ and Sodium, Sul- phide of ....	4, 239
„ Bromopalladite ....	6, 356	Manganesian epidote ....	3, 430
„ Bromoplatinate ....	6, 332	Manganic acid ....	4, 208
„ Carbide ....	4, 213	„ Cyanide ....	7, 421
„ Chlorides ....	4, 227	„ Hydriodate....	4, 226
„ Chloride, with Cya- nide of Mercury ....	8, 24	„ Hydrochlorate ....	4, 229
„ Chloro-aurate ....	6, 237	„ Oxalate ....	9, 146
„ Chloropalladite ....	6, 356		
„ Chloroplatinate ....	6, 332		
„ Chromide ....	4, 247		
„ Cobaltidcyanide ....	7, 495		
„ compact and fibrous	4, 203		
„ cupreous ....	5, 468		
„ Cuprocyanide ....	8, 7		
„ Ferricyanide ....	7, 488		
„ Ferrocyanide ....	7, 488		
„ Fluorides ....	4, 230		
„ with fluxes....	4, 239		
„ with glass-fluxes ....	4, 245		
„ grey oxide ....	4, 205		
„ ores containing more than $1\frac{1}{2}$ at. and			

Manganic Oxide ....	4, 202	Manganous Ethylosulphite ....	8, 410
„ Phosphate ....	4, 217	„ Formiate ....	7, 279
„ Salts ....	4, 203	„ Fumarate ....	10, 28
„ Silicate ....	4, 244	„ Gallate ....	12, 408
„ Tartrate ....	10, 296	„ Hypophosphite ....	4, 215
Manganico-ammonic Sulphate ....	4, 233	„ Hyposulpharsenite ....	4, 315
„ -ferric Phosphate ....	5, 303	„ Hyposulphate ....	4, 220
„ -potassic Sulphate ....	4, 238	„ Hyposulphite ....	4, 220
Manganidecyanide of Cadmium....	7, 426	„ Hyposulphophosphate ....	4, 225
„ Lead ....	7, 428	„ Iodate ....	4, 227
„ Potassium ....	7, 421	„ Itaconate ....	10, 426
„ Silver ....	8, 31	„ Kinate ....	16, 330
„ Zinc ....	7, 425	„ Lactate ....	11, 486
Manganide of Iron ....	5, 300	„ Malate ....	11, 220
Manganiferous Magnetic Iron-ore	5, 300	„ Mellitate ...	10, 8
„ Zinc-spar ....	5, 16	„ Metaphosphate ....	4, 217
Manganocyanide of Potassium....	7, 421	„ Molybdate ....	4, 246
Manganoso-aluminic Silicate ....	4, 245	„ Nitrate ....	4, 231
„ „ Sulphate ....	4, 242	„ Nitrite ....	4, 231
„ -ammonic Arseniate ....	4, 315	„ Nitrobenzoate ....	12, 125
„ „ Carbonate ....	4, 231	„ Oxalate ....	9, 146
„ „ Hydrochlo- rate ....	4, 233	„ Oxide ....	4, 197
„ „ Phosphate ....	4, 231	„ Perchlorate ....	4, 230
„ „ Sulphate ....	4, 232	„ Phosphates ....	4, 215
„ -ferrous Phosphate....	5, 301	„ Phosphite ....	4, 215
„ -glucinic Silicate ....	4, 245	„ Picrate ....	11, 214
„ -manganic Cyanide....	7, 421	„ Piperate ....	15, 10
„ „ Oxide ....	4, 200	„ Pyrophosphate ....	4, 217
„ „ Salts ....	4, 202	„ Pyrotartrate ....	11, 90
„ „ Sulphate ....	4, 224	„ Racemate ....	10, 355
„ -potassic Sulphate ....	4, 238	„ Rhodizonate ....	10, 403
„ -silicic Hydrofluuate....	4, 244	„ Salts ....	4, 199
„ -sodic Sulphate ....	4, 239	„ Selenite ....	4, 226
„ -sodio-ammonic Pyro- phosphate ....	4, 240	„ Silicate ....	4, 242
„ -uranic Acetate ....	13, 444	„ Stannate ....	5, 102
Manganous Acetate ....	8, 308	„ Styphnate ....	11, 233
„ Aconitate ....	11, 406	„ Suberate ....	13, 210
„ Alloxanate ....	10, 165	„ Succinate ....	10, 123
„ Ammonio-sulphate ....	4, 232	„ Sulphantimoniate ....	4, 391
„ Antimoniate ....	4, 391	„ Sulpharseniate ....	4, 315
„ Arseniate ....	4, 314	„ Sulpharsenite ....	4, 315
„ Azelaate ....	17, 81	„ Sulphate ....	4, 221
„ Benzoate ....	12, 41	„ Sulphide ....	4, 218
„ Borate ....	4, 214	„ Sulphite ....	4, 220
„ Bromate ....	4, 227	„ Sulphomolybdate ....	4, 247
„ Bromide ....	4, 227	„ Sulphotungstate ....	4, 246
„ Camphorate ....	14, 461	„ Sulphovinate ....	8, 425
„ Carbonate ....	4, 213	„ Tartrate ....	10, 296
„ Chlorate ....	4, 230	„ Tellurite and Tellu- rate ....	4, 426
„ Chloride ....	4, 227	„ Titanate ....	4, 246
„ Chromate ....	4, 247	„ Tungstate ....	4, 246
„ Chrysammate ....	12, 5	„ Valerate ....	11, 34
„ Cinnamate ....	13, 276	„ Vanadiate ....	4, 247
„ Citraconate ....	10, 421	„ Vanadite ....	4, 247
„ Citrate ....	11, 453	<i>Mangifera gabonensis</i> , fat from the almonds of ....	16, 391
„ Croconate ....	10, 393	Mangold - wurzel juice, fer- mented gum from ....	15, 205
„ Cyanide ....	7, 421		



Mangold-wurzel juice, preparation of lactic acid from ....	11, 477	decomposition of cerin ....	18, 135
„ leaves, eremacausis of ....	7, 92	Margaric acid, natural, separability of, into palmitic and stearic acids ....	16, 351
„ preparation of cane - sugar from ....	15, 242	„ reactions of ....	16, 357
„ red colouring matter of ....	16, 531	Margaric and Myristic acids, melting points of mixtures of ....	16, 473
Mangostin ....	17, 330	„ and Oleic acids, melting points of mixtures of, according to Chevreul ....	17, 74
Manna, acrid resin of ....	17, 450	„ and Palmitic acids, melting points of mixtures of ....	16, 474
„ of Briançon, Melezitose in ....	15, 299	„ and Stearic acids, melting points and mode of solidification of mixtures of ....	17, 114
„ of Eucalyptus, Melitose in ....	15, 296	Margarin, composition of ....	7, 237
„ <i>seri lactis</i> ....	15, 217	Margarodite ....	3, 451
„ from Sinai, cane-sugar in ....	15, 241	Margarone ....	17, 382; 17, 129
„ of Syria, occurrence of Trehalose in ....	15, 299	Margarosulphuric acid ....	17, 88
Mannide ....	15, 368	Margraff ....	1, 4
Mannitan ....	15, 369	Marjoram-camphor ....	14, 379
Mannitanides, formation of ....	15, 362	„ -oil ....	14, 379
Mannitartrates ....	15, 377	Marl ....	3, 391
Mannitates ....	10, 382	Marl-slate, bituminous, vanadium in ....	4, 81
Mannite, combinations of, with bases ....	15, 365	Marmolite ....	3, 395
„ compound of, with formic acid ....	15, 374	Marrubiin ....	18, 234
„ decompositions of ....	15, 360—365	<i>Mars</i> , syn. with Iron ....	5, 182
„ fermentation of ....	7, 98	Marsdenine ....	18, 199
„ formation of ....	15, 358	Marsh-air ....	7, 249
„ „ glucose from ....	15, 310	„ -gas, decompositions of ....	7, 253
„ hydrated ....	15, 365	„ formation of ....	7, 251
„ in the olive ....	15, 540	„ preparation of ....	7, 252
„ preparation of, from manna ....	15, 358	„ preparation of methylic alcohol from ....	12, 477
„ properties of ....	15, 359	„ properties of ....	7, 253
„ reactions of, with acids ....	15, 362	„ relative position of atoms in ....	7, 37
„ sources of ....	15, 356, 540	„ sources of ....	7, 248
Mannitic Bioleate ....	17, 100	Marsh-mallow, mucilage of ....	15, 211
Mannito-bisulphuric acid ....	15, 371	„ root, preparation of asparagine from ....	10, 241
Mannitose ....	15, 339	Marsh's test for arsenic ....	4, 268
Mannito-tersulphuric acid ....	15, 371	<i>Marrubium vulgare</i> , ferment-oil of ....	14, 406
Mannityl Bistearate ....	17, 127	Martite ....	5, 194
„ Sexstearate ....	17, 127	Mascagnine ....	2, 462
<i>Maranta indica</i> and <i>M. arundinacea</i> , preparation of starch from the root-sprouts of ....	15, 77	Masopin ....	17, 422
Marble ....	3, 186	Massicot ....	5, 108
Margarate of Capryl ....	16, 382	Massoy, oil of ....	14, 380
„ Lime ....	16, 362	Masterwort, oil of ....	14, 381
„ Strontia ....	16, 362	Mastic ....	17, 423
Margaric acid ....	16, 472		
„ of Chevreul, preparation of ....	16, 355		
„ formation of, by			

- Masticin .... 17, 425  
 Maticin .... 18, 234  
 Matico, oil of .... 14, 382  
*Matière colorante rouge*, see alizarin.  
 „ *visqueuse* (Gobley's) 16, 481  
 Matter, magnetic condition of all .... 1, 514  
 „ theories respecting the nature of 1, 145, 158, 159  
 Maximum densities of water and aqueous solutions.... 1, 225  
 „ tension of vapours, tables of 1, 261—264; 2, 503, 504  
 Mayna resin .... 16, 191  
 Meadow-sweet, neutral oil of .... 14, 382  
 Measures, tables for converting French into English 2, 497  
 „ and Weights .... 1, ix—xi  
 Meat, preservation of .... 7, 100, 116  
 Mecca Balsam ... 17, 393  
 „ oil of .... 14, 383  
 Mechanical combination .... 1, 20  
 „ division, effect of, in facilitating combustion.... 2, 26  
 Mechloic acid .... 14, 425  
 Meconamidic acid .... 12, 434  
 Meconate of Ammonia.... 12, 427  
 „ Ethylmeconic acid 12, 432  
 „ Morphine.... 16, 436  
 „ Papaverine .... 18, 203  
 „ Thebaine.... 18, 209  
 „ Urea .... 13, 406  
 Meconates, metallic .... 12, 427  
 Meconic acid .... 12, 421  
 „ crystallised .... 12, 426  
 „ reaction of, with ferric salts .... 12, 429  
 Meconidine .... 18, 199  
 Meconin .... 14, 423  
 „ -hyponitric acid .... 14, 443  
 „ -resin .... 14, 425  
 Medicago, resin of .... 17, 450  
 Medicinal action of organic compounds .... 7, 66  
 Medjidite .... 4, 191  
 Medullic acid .... 17, 540  
*Medusæ*, phosphorescence of .... 1, 185  
 Meerschäum .... 3, 400  
 „ of Longbanshyttan 3, 398  
 Mejonite .... 3, 430  
 Melaïn .... 18, 418  
 Melam .... 9, 482; 10, 548  
 Melamine .... 9, 479; 10, 548  
 Melampyrite .... 15, 389, 543  
 „ compounds of, with bases .... 15, 390  
 Melampyrosulphate of baryta .... 15, 392  
 Melanchym .... 17, 439  
 Melangallic acid, *see* Metagallic acid.  
 Melanic acid .... 11, 163  
 Melaniline .... 11, 351  
 Melanin .... 18, 417  
 Melanochine .... 17, 272  
 Melanochroite .... 5, 170  
 Melanoximide .... 11, 366  
 Melathine .... 9, 11, 13  
 Melene .... 18, 150  
 „ sulphide .... 9, 394  
 Meletin, *see* Quercetin.  
 Melezitose .... 15, 298  
 Melilot, preparation of cumarin from.... 13, 322  
 Melinose .... 5, 167  
*Melinum* .... 5, 52  
 Melissic acid .... 18, 152  
 „ alcohol .... 18, 150  
 Melissin .... 18, 150  
 Melissyl-sulphuric acid.... 18, 152  
 Melitose .... 15, 296  
 Mellitate of Alumina .... 10, 7  
 „ Ammonia .... 10, 3  
 „ Ammonio-cupric .... 10, 11  
 „ of Aniline .... 11, 263  
 „ Baryta .... 10, 6  
 „ Cinchonine .... 17, 216  
 „ Cobalt .... 10, 9  
 „ Cupric .... 10, 10  
 „ Ferric .... 10, 9  
 „ Ferrous .... 10, 9  
 „ Furfurine.... 10, 382  
 „ Lead .... 10, 8  
 „ Magnesia .... 10, 6  
 „ Manganese .... 10, 8  
 „ Mercuric .... 10, 11  
 „ Mercurous .... 10, 11  
 „ of Morphine .... 16, 435  
 „ Nickel .... 10, 9  
 „ Palladium .... 10, 13  
 „ Palladium with Ammonia .... 10, 13  
 „ Palladium and Potassium .... 10, 13  
 „ Palladium and Sodium .... 10, 13  
 „ Potash .... 10, 5  
 „ Quinine .... 17, 289  
 „ Silver .... 10, 12  
 „ Silver and Potassium .... 10, 12  
 „ Soda .... 10, 6  
 „ Solanine .... 18, 98  
 „ Strontia .... 10, 6  
 „ Strychnine .... 17, 502  
 „ Zinc .... 10, 8

Mellitene ....	10, 1	Mercuric Bromates ....	6, 45
Mellitic acid ....	10, 1	„ Bromate with Mer-	
Mellone ....	9, 378	curic Amide....	6, 83
Melloni's experiments on ra-		„ Bromate, hydrated,	
diant heat ....	1, 214	with Nitride of Mer-	
Mellonides ....	9, 388; 10, 545	cury ....	6, 83
Melting point ....	1, 253	„ Bromide ....	6, 42
„ points, tables of ....	1, 290	„ Bromide with Alkarsin	9, 323
Menaccanite ....	5, 291	„ Cacodylate ....	9, 331
Menaphthalidine, <i>see</i> Menaphthyl-		„ Camphorate ....	14, 462
amine.		„ Carbonate ....	6, 15
Menaphthoximide ....	14, 128	„ Chlorate ....	6, 62
Menaphthylamine ....	14, 125	„ Chloride ....	6, 53
Mendipite ....	5, 147	„ Chloride with Alkarsin	9, 324
Menispermene ....	17, 52	„ Chloride with Aspara-	
<i>Mentha viridis</i> , volatile oil of ....	14, 383	gine....	10, 248
Menthene ....	14, 445	„ Chloride, cacodylate of	9, 331
Menyanthin ....	15, 112, 346; 16, 30	„ Chloride with Cupric	
Mercaptan ....	8, 340	acetate ....	8, 332
„ Amylic ....	11, 38	„ Chloride with hydrio-	
„ Butylic ....	10, 99	date of Cinchonine ....	17, 212
„ Methylic ....	7, 284	„ Chloride with Nicotine	14, 228
Mercaptans ....	7, 211	„ Chloride with Strych-	
Mercaptide of Copper ....	8, 345	nine ....	17, 497
„ Gold ....	8, 347	„ Chloride, reaction of,	
„ Lead ....	8, 345	with albumin ....	18, 299
„ Mercury ....	8, 345	„ Chloride with sulphate	
„ Platinum ....	8, 349	of Strychnine ....	17, 497
„ Potassium ....	8, 344	„ Chloride, use of for pre-	
„ Silver ....	8, 347	serving wood ....	7, 113
„ Sodium....	8, 345	„ Chromate ....	6, 114
Mercurised Cotton ....	15, 141	„ Citrate ....	11, 460
Mercurallyl ....	13, 548	„ Crenate ....	17, 468
Mercurate of Ammonia ....	6, 77	„ Croconate ....	10, 395
„ Lime ....	6, 107	„ Cyanide ....	8, 11
Mercurialine ....	18, 201	„ Cyanide with Acetate	
<i>Mercurialis annua</i> , oil of ....	14, 383	of Soda ....	8, 333
Mercuric Acetate ....	8, 332	„ Cyanide with Am-	
„ Acetate with Mercuric		monia ....	8, 17
Cyanide ....	8, 332	„ Cyanide with Bro-	
„ Aconitate ....	11, 406	mide of Barium ....	8, 22
„ Alloxanate ....	10, 168	„ Cyanide with Bro-	
„ Amide, compounds of,		mide of Calcium ....	8, 23
with basic Mercuric		„ Cyanide with Bro-	
Nitrate ....	6, 44	mide of Potassium....	8, 20
„ Amide with Mercuric		„ Cyanide with Bro-	
Bromate ....	6, 83	mide of Sodium ....	8, 21
„ Amide with Mercuric		„ Cyanide with Bro-	
Trisulphate ....	6, 79	mide of Strontium ....	8, 22
„ Amido-chloride ....	6, 85	„ Cyanide with Caf-	
„ Amido-chloride with		feine ....	13, 234
Sal-ammoniac ....	6, 87	„ Cyanide with Chlo-	
„ Amido-iodide ....	6, 81	ride of Ammonium....	8, 17
„ Amid-oxychloride ....	6, 88	„ Cyanide with Chlo-	
„ Amylosulphates ....	11, 60	ride of Barium ....	8, 22
„ Antimoniate ....	6, 120	„ Cyanide with Chlo-	
„ Arsenite ....	6, 116	ride of Calcium ....	8, 23
„ Aspartate ....	10, 238	„ Cyanide with Chlo-	
„ Benzoate ....	12, 44	ride of Cobalt ....	8, 26



Mercuric Cyanide with Chloride of Magnesium....	8, 23	Mercuric Fluoride ....	6, 66
„ Cyanide with Chloride of Manganese ....	8, 24	„ Formiate ....	7, 282
„ Cyanide with Chloride of Nickel ....	8, 26	„ Fulminate ....	9, 300
„ Cyanide with Chloride of Potassium ....	8, 20	„ Fumarate ....	10, 31
„ Cyanide with Chloride of Sodium ....	8, 21	„ Gallate ....	12, 411
„ Cyanide with Chloride of Strontium ....	8, 22	„ Hyposulphate ....	6, 27
„ Cyanide with Chloride of Zinc ....	8, 24	„ Hyposulphosphite ....	6, 31
„ Cyanide with Chromate of Potash ....	8, 23	„ Iodate ....	6, 41
„ Cyanide with Ferrocyanide of Potassium ....	8, 25	„ Iodide ....	6, 36
„ Cyanide with Formiate of Ammonia ....	8, 26	„ Iodide, compounds of, with Ethylic and Methyl Sulphides ....	13, 450
„ Cyanide with Hydrodate and Hydrobromate of Cinchonine	17, 214	„ Iodide with Mercuric Nitrate ....	6, 76
„ Cyanide with Hydrochlorate of Ethylamine ...	9, 62	„ Iodide with Nicotine	14, 228
„ Cyanide with Hydrochlorate of Strychnine ....	17, 500	„ Iodosulphate....	6, 41
„ Cyanide with Hyposulphide of Potash ....	8, 19	„ Iodosulphide....	6, 41
„ Cyanide with Iodide of Barium ....	8, 22	„ Kinatate ....	16, 233
„ Cyanide with Iodide of Calcium ....	8, 23	„ Lactate ....	11, 494
„ Cyanide with Iodide of Potassium ....	8, 19	„ Leucate ....	15, 63
„ Cyanide with Iodide of Sodium ....	8, 21	„ Malate ....	10, 226
„ Cyanide with Iodide of Strontium ....	8, 22	„ Mandelate ....	12, 59
„ Cyanide with Mercuric Acetate ....	8, 332	„ Mellitate ....	10, 11
„ Cyanide with Nicotine	14, 229	„ Methyl ....	13, 399
„ Cyanide with Nitrate of Silver ....	8, 33	„ Mucate ....	11, 509
„ Cyanide with Strychnine....	17, 500	„ Nitrate ....	6, 74
„ Cyanide with Mercuric Nitrate ....	8, 17	„ Nitrate, basic compounds of, with Mercuric Amide....	6, 94
„ Cyanide with Sulphocyanide of Barium ....	8, 96	„ Nitrate with Mercuric Cyanide ....	8, 17
„ Cyanide with Sulphocyanide of Calcium ....	8, 96	„ Nitrate with Mercuric Iodide ....	6, 76
„ Cyanide with Sulphocyanide of Magnesium	8, 96	„ Nitrate with Mercuric Phosphide ....	6, 76
„ Cyanide with Sulphocyanide of Potassium	8, 96	„ Nitrate with Mercuric Sulphide ....	6, 76
„ Ethyl ....	13, 512	„ Nitrate with Silver Iodide ....	6, 199
		„ Nitrate with Silver Nitrate ....	6, 199
		„ Nitrate with Urea ....	7, 374
		„ Nitro-iodide ....	6, 81
		„ Oleate ....	17, 73
		„ Osmiamate ....	6, 422
		„ Oxalate ....	9, 168 ; 13, 527
		„ Oxide....	6, 8
		„ Oxide with Asparagine	10, 248
		„ Oxide, action of, on Bromide and Iodide of Ethyl ....	13, 417
		„ Oxide, Hydrated ....	6, 11
		„ Oxybromide ....	6, 43
		„ Oxychloride ....	6, 59
		„ Oxychloride, Sulphate of ....	6, 64
		„ Oxyiodide ....	6, 40
		„ Oxysulphocyanide ....	8, 95
		„ Perchlorate ....	6, 62

Mercuric Periodates ....	6, 41	Mercurico-potassic Sulphate ....	6, 99
„ Persulphomolybdate ....	6, 112	„ -sodic Hyposulphite ....	6, 103
„ Phosphate ....	6, 18	„ -strontic Hyposulphite ....	6, 107
„ Phosphobromide ....	6, 45	<i>Mercurius</i> ....	6, 1
„ Picrate ....	11, 227	„ <i>cinereus Blackii</i> , see	
„ Piperate ....	15, 10	<i>Edinburgensium</i> ....	6, 94
„ Platinocyanide ....	10, 510	„ <i>dulcis</i> , s. <i>kalomela-</i>	
„ Pyrotartrates ....	11, 98	<i>nicus</i> , see <i>loticus</i> ....	6, 45
„ Salts ....	6, 12	„ <i>precipitatus albus</i> ....	6, 85, 87
„ Selenite ....	6, 33	„ <i>precipitatus per se</i> ....	6, 8
„ Silicofluoride ....	6, 110	„ <i>precipitatus ruber</i> ....	6, 9
„ Stannate ....	6, 125	„ <i>solubilis Hahnemanni</i> ....	6, 91
„ Stearate ....	17, 112	„ <i>sublimatus corrosivus</i> ....	6, 53
„ Suberate ....	13, 211	Mercuroso-ammonic Acetate ....	8, 332
„ Succinate ....	10, 128	„ „ Bromate ? ....	6, 83
„ Sulphantimoniate ....	6, 121	„ „ Nitrate ....	6, 91
„ Sulpharseniate ....	6, 118	„ -mercuric Iodide ....	6, 35
„ Sulpharsenite ....	6, 118	„ „ Nitrate ....	6, 73
„ Sulphate ....	6, 28	„ „ Sulphate ....	6, 30
„ Sulphate with Phos-		„ -potassic Hyposul-	
phite of Mercury ....	6, 32	phite ....	6, 98
„ Sulphate with Sulphide		Mercurotetrethylum Iodide ....	13, 482
of Mercury ....	6, 32	Mercurous Acetate ....	8, 330
„ Sulphide, amorphous ....	6, 25	„ Aconitate ....	11, 406
„ Sulphide, crystalline ....	6, 19	„ Amide with Trisul-	
„ Sulphide with Mercu-		phate of Mercurous	
ric Nitrate ....	6, 76	Oxide ? ....	6, 78
„ Sulphide with Mercu-		„ Amido-chloride ....	6, 84
ric Sulphate ....	6, 92	„ Antimoniate ....	6, 120
„ Sulphobromide ....	6, 45	„ Arseniate ....	6, 117
„ Sulphocarbonate ....	6, 31	„ Arsenite ....	6, 116
„ Sulphochloride ....	6, 63	„ Benzoate ....	12, 43
„ Sulphocyanide ....	8, 94	„ Bromide ....	6, 42
„ Sulphofluoride ....	6, 66	„ Bromate ....	6, 44
„ Sulphomolybdate ....	6, 112	„ Butyrate ....	10, 88
„ Sulphophosphate ....	6, 31	„ Camphorate ....	14, 462
„ Sulphophosphite ....	6, 31	„ Carbonate ....	6, 15
„ Sulphotellurite ....	6, 122	„ Chlorate ....	6, 61
„ Sulphotungstate ....	6, 111	„ Chloro-hyposulphite ....	6, 65
„ Sulphovinate ....	8, 428	„ Chloride ....	6, 45
„ Tannate ....	15, 470	„ Chloride, Sulphate of ....	6, 64
„ Tartrate ....	10, 323	„ Chromate ....	6, 113
„ Tellurate ....	6, 122	„ Chrysammate ....	12, 6
„ Tellurite ....	6, 121	„ Cinnamate ....	13, 277
„ Thiacetate ....	13, 449	„ Citrate ....	11, 459
„ Trisulphate with Mer-		„ Cobaltidcyanide ? ....	8, 26
curic Amide ....	6, 79	„ Crenate ....	17, 468
„ Tungstate ....	6, 111	„ Croconate ....	10, 395
„ Urate ....	10, 477	„ and Cuprous oxide,	
„ Vanadite ....	6, 112	hyposulphite of ....	6, 131
Mercurico-ammonic Acetate ....	8, 232	„ Cyanate ....	8, 68
„ „ Fluoride ....	6, 91	„ Fluoride ....	6, 65
„ „ Hyposul-		„ Formiate ....	7, 281
phite ....	6, 78	„ Fumarate ....	10, 30
„ „ Sulphate ....	6, 80	„ Gallate ....	12, 411
„ „ Tungstate ....	6, 111	„ Hippurate ....	12, 80
„ -argentic Nitrate ....	6, 199	„ Hyposulphate ....	6, 27
„ -barytic Hyposulphite ....	6, 106	„ Iodide ....	6, 34
„ -calcic Hyposulphite ....	6, 107	„ Itaconate ....	10, 427

Mercurous Lactate ....	11, 494	Mercury ....	6, 1
„ Leucate ....	15, 62	„ and Air, comparison	
„ Malate ....	10, 225	„ of the expansion of,	
„ Maleate ....	8, 159	„ by heat ....	1, 225
„ Mannitate ....	15, 384	„ alleged solubility of, in	
„ Mellitate ....	10, 11	„ boiling water ....	5, 4
„ Methyl, nitrate of ....	13, 399	„ Amido-bromide ....	6, 83
„ Molybdate ....	6, 112	„ Ammonio-dichloride....	6, 83
„ Mucate ....	11, 509	„ „ -diodide....	6, 80
„ Nitrates ....	6, 69—72	„ „ -ferrocyanide	8, 24
„ Nitrate with phos-		„ „ -gallates ....	12, 411
„ phide of mercury ....	6, 75	„ „ -protobro-	
„ Nitrite ....	6, 69	„ „ mide ....	6, 82
„ „ decomposition		„ „ -protochlo-	
„ of urea by ....	7, 367	„ „ ride ....	6, 84
„ Nitro-arsenate ....	6, 119	„ „ -protiodide	6, 80
„ Nitrosalicylate ....	12, 310	„ „ -protoxide....	6, 77
„ Oleate ....	17, 73	„ Argentocyanide ....	8, 33
„ Osmiamate ....	6, 422	„ Biniodide ....	6, 40
„ Oxalate ....	9, 167; 13, 527	„ black oxide ....	6, 5
„ Oxide ....	6, 5	„ Bromides ....	6, 42
„ Oxide and Guanine,		„ Chlorides ....	6, 45, 53
„ nitrate of ....	10, 483	„ Chlorarsenide ....	6, 118
„ Oxurate ....	10, 171	„ Cyanide, <i>see</i> Mercuric	
„ Perchlorate....	6, 62	„ Cyanide.	
„ Periodate ....	6, 41	„ Dibromide ....	6, 42
„ Persulphomolybdate	6, 112	„ Dichloride ....	6, 45
„ Phosphate ....	6, 17	„ Difluoride ....	6, 65
„ Phosphonitrate ....	6, 75	„ Diniodide ....	6, 34
„ Picrate ....	11, 227	„ Dioxide ....	6, 5
„ Piperate ....	15, 10	„ Disulphide ....	6, 19
„ Pyromucate ....	10, 385	„ Ethyl-compounds con-	
„ Pyrophosphate ....	6, 17	„ taining ....	9, 109
„ Racemate ....	10, 360	„ extinction or deadening	
„ Salts ....	6, 7	„ of ....	6, 3
„ Selenite ....	6, 33	„ Fluorides ....	6, 65
„ Silicate ....	6, 110	„ freezing of, in a red-	
„ Silicofluoride ....	6, 110	„ hot platinum cruci-	
„ Stannate ....	6, 125	„ ble, by the rapid vapo-	
„ Stearate ....	17, 112	„ rization of ether and	
„ Suberate ....	13, 211	„ solid carbonic acid....	1, 278
„ Succinate ....	10, 128	„ Fulminating....	10, 540
„ Sulphantimoniate ....	6, 121	„ Fulminurate ....	10, 561
„ Sulpharsenate ....	6, 118	„ Hydrothiosulpho - cy-	
„ Sulpharsenite ....	6, 118	„ anide ....	8, 101
„ Sulphate ....	6, 28	„ Iodides ....	6, 34
„ Sulphide ....	6, 19	„ Mellonide ....	9, 394
„ Sulphocyanide ....	8, 94	„ Mercaptide ....	8, 345
„ Sulphomolybdate ....	6, 112	„ movements of, in the	
„ Sulphotellurate ....	6, 122	„ circuit of the voltaic	
„ Sulphotungstate ....	6, 111	„ battery ....	1, 486
„ Tannate ....	15, 470	„ movements of, in the	
„ Tartrate ....	10, 322	„ simple galvanic cir-	
„ Tellurate ....	6, 121	„ cuit ....	1, 381
„ Tellurite ....	6, 121	„ Muriate ....	6, 53
„ Trisulphate with		„ Nitride ....	6, 66
„ Mercurous Amide?	6, 78	„ „ with hydrated	
„ Tungstate ....	6, 111	„ bromate of mercuric	
„ Vanadate ....	6, 112	„ oxide ....	6, 83



Mercury, Nitrochloride ....	6, 89	Mercury, Sub-nitrate ....	6, 69
„ Osmiate ....	6, 422	„ Sub-oxide ....	6, 5
„ Oxides ...	6, 58	„ Sulphides ....	6, 19, 25
„ Oxyamide ....	6, 78	„ Sulphobromide ....	6, 45
„ Oxybromide ....	6, 43	„ Sulphochloride ....	6, 63
„ Oxychloride ....	6, 59	„ Sulphoselenide ....	6, 33
„ Oxycyanide ....	8, 16	„ Thiocyanide ....	8, 115
„ Oxyiodide ....	6, 36	„ -vapours, tension of, at different tempera- tures ....	1, 262
„ Oxysalts, <i>see</i> Mercuric and Mercurous salts.		„ volatility of, at low temperatures ....	6, 4
„ Phosphide ....	6, 17	„ Xanthates ....	8, 461
„ Phosphide with mer- curic nitrate ....	6, 76	„ and Ammonium, amal- gam of ....	6, 67
„ Phosphide with mer- curic sulphate ....	6, 32	„ and Ammonium, Bro- mide of ....	6, 83
„ Phosphide with mer- curous nitrate ....	6, 75	„ and Ammonium, Iodide of ....	6, 82
„ Phosphochloride ....	6, 62	„ and Ammonium, Pro- tochloride of ....	6, 89
„ Platinocyanide ....	8, 57	„ and Antimony, amal- gam of ....	6, 120
„ Protiodide ....	6, 36	„ and Arsenic, amalgam of ....	6, 116
„ Protobromide ....	6, 42	„ and Barium, amalgam of ....	6, 105
„ Protochloride ....	6, 53	„ and Barium, Bromide of ....	6, 106
„ Protochloride with bi- chromate of ammo- nia ....	6, 115	„ and Barium, Chloride of ....	6, 106
„ Protochloride with bi- chromate of potash	6, 115	„ and Barium, Iodide of ....	6, 106
„ Protochloride with monochromate of potash ....	6, 115	„ and Barium, Sulphide of ....	6, 105
„ Protochloride with se- lenocyanide of mer- cury ....	8, 124	„ and Cadmium, amal- gam of ....	6, 124
„ Protochloride with sul- phethyl ....	8, 339	„ and Cadmium, Iodide of ....	6, 124
„ Protochloride with urea ....	7, 373	„ and Calcium, amalgam of ....	6, 107
„ Protofluoride ....	6, 66	„ and Calcium, Chloride of ....	6, 108
„ Protosulphide ....	6, 19	„ and Calcium, Iodide of ....	6, 107
„ Protoxide ....	6, 8	„ and Cerium, Chloride of ....	6, 109
„ purification of, from foreign metals ....	5, 2	„ and Cobalt, amalgam of ....	6, 129
„ reactions of ....	6, 6, 12	„ and Cobalt, Chloride of ....	7, 129
„ red oxide of ....	6, 8	„ and Copper, amalgam of ....	6, 131
„ „ prepara- tion of oxygen from	2, 21	„ and Copper, Chloride of ....	6, 131
„ salts, action of hypo- sulphurous, penta- thionic, tetrathionic, and trithionic acids on ....	6, 27	„ Copper, and Potassium, Chloride of ....	6, 131
„ salts, solubility of, in alcohol ....	8, 272	„ and Glucinum, Chlo- ride of ....	6, 109
„ Selenide ....	6, 32		
„ Selenocyanide with pro- tochloride of mer- cury ....	8, 124		
„ Sub-chloride ....	6, 45		
„ Sub-muriate ....	6, 45		

Mercury and Gold, amalgam of	6, 247	Mercury and Strontium, amal-	
„ and Hydrogen, Bro-		gam of ....	6, 106
„ and Hydrogen, Chlo-	6, 44	„ and Strontium, Bro-	
ride of ....		mide of ....	6, 107
„ and Hydrogen, Iodide	6, 61	„ and Strontium, Chlo-	
of ....		ride of ....	6, 107
„ and Iron, amalgam of	6, 40	„ and Strontium, Iodide	
„ and Iron, Bromide of	6, 128	of ....	6, 107
„ and Iron, Chloride of	6, 129	„ and Tellurium, amal-	
„ and Iron, Iodide of ....	6, 129	gam of ....	6, 121
„ and Lead, amalgam of	6, 126	„ and Tetrethylum, Io-	
„ and Lead, Cyanide of ?	8, 24	dides of ....	13, 483
„ and Lead, Selenide of	6, 127	„ and Tin, amalgam of....	6, 124
„ and Lithium, Chloride		„ and Tin, Chloride of....	6, 125
of ....	6, 105	„ and Yttrium, Chloride	
„ and Magnesium, amal-		of ....	6, 109
gam of ....	6, 108	„ and Zinc, amalgam of	6, 122
„ and Magnesium, Bro-		„ and Zinc, Chloride of....	6, 123
mide of ....	6, 109	„ and Zinc, Cyanide	
„ and Magnesium Chlo-		of ?....	8, 24
ride....	6, 109	„ and Zinc, Iodide of ....	6, 123
„ and Magnesium, Iodide		„ and Zinc, Selenide of	6, 123
of ....	6, 108	„ and Zirconium, amal-	
„ and Manganese, amal-		gam of ....	6, 110
gam of ....	6, 115	Mesaconate of Ammonia	10, 428
„ and Manganese, Bro-		„ Baryta ....	10, 429
mide of ....	6, 116	„ Cupric ....	10, 432
„ and Manganese, Chlo-		„ of Lead ....	10, 430
ride of ....	6, 116	„ Lime ....	10, 430
„ and Methyl Cyanide....	13, 412	„ Potash ....	10, 429
„ and Nickel, amalgam		„ Silver ....	10, 432
of ....	6, 130	„ Soda ....	10, 429
„ and Nickel, Chloride of	6, 130	Mesaconic acid....	10, 427
„ and Osmium, amalgam		„ Ether ....	10, 433
of ....	6, 422	Mesite ....	7, 258
„ and Osmium, Proto-		„ Reichenbach's	9, 53
chloride of ....	6, 422	„ Weidmann and	
„ and Potassium, amal-		Schweizer's....	9, 51
gam of ....	6, 97	Mesitene ....	9, 52
„ and Potassium, Bro-		Mesitic Alcohol	9, 6
mide of ....	6, 101	„ Aldehyde ....	9, 27
„ and Potassium, Cya-		„ Chloral....	9, 25
nide of ....	8, 18	„ Ether ....	9, 21
„ and Potassium, Iodide		Mesityl Chloride	9, 27
of ....	6, 99	„ Iodide ....	9, 26
„ and Potassium, Sul-		„ Oxide ....	9, 25; 13, 471
phide of (hydrated)	6, 98	Mesitylene ....	9, 17; 13, 340
„ and Potassium sulpho-		„ Bihydrate ....	13, 343
cyanide ....	8, 95	„ Hydriodate....	9, 26
„ and Silver, amalgams		„ Hydrochlorate	9, 27
of ....	6, 198	Mesityl-hyphosphorous acid	9, 28
„ and Silver, Nitrate of	6, 199	Mesitylol ....	9, 17; 13, 340
„ and Sodium, amalgam		Mesityl-phosphoric acid	9, 29
of ....	6, 103	„ -sulphuric acid	9, 29; 12, 518; 13, 314
„ and Sodium, Bromide		Mesole ....	3, 436
of ....	6, 104	Mesolite ....	3, 438
„ and Sodium, Chloride		„ electric properties of....	1, 320
of ....	5, 104	Mesotype, calcareous	3, 438

Mesoxalates ....	9, 425	specific gravities and	
Mesoxalic acid ....	9, 425	atomic weights of ....	1, 55
Meta-antimoniate of Ammonia	4, 372	Metals, replacement of Hydro-	
Metacaprol? ....	14, 493	gen by ....	7, 73
Metacaprylene ....	13, 182	„ specific heat of ....	1, 242
Metacetamide ....	9, 432	Metamargaric acid ....	17, 88
Metacetamine ....	9, 411	Metamerism ....	1, 110
Metacetic acid ....	9, 402	„ in organic com-	
„ Ether ....	9, 409	pounds ....	7, 69
„ or Metacetic alcohol	9, 398	Metamorphine ....	16, 441
Metacetone ....	9, 409	Metanaphthalin ....	14, 10
Metacrolein ....	13, 551	Metanethol ....	14, 199
Metagallic acid, formation of,		„ -camphor ....	14, 199
from tannic acid by heat ....	15, 458	Metapectates ....	15, 411
Metagummic acid ....	15, 205	Metapectin ....	15, 400
„ acid, formation of		Metaphosphates ....	2, 132
Arabic acid (gum		Metaphosphate of Alumina ....	3, 311
arabic) from ....	15, 197	„ Ammonia ....	2, 442
Metalbumin ....	18, 281, 332	„ Aniline ....	11, 257
Metaldehyde ....	8, 281	„ Baryta ....	3, 145
Metalepsy in organic compounds	7, 71	„ Bismuth-oxide ....	4, 434
Metaligno-humic acid ....	17, 474	„ Cadmic oxide ....	5, 57
Metallic Bromides ....	2, 285	„ Chromic oxide ....	4, 123
„ Chlorides ....	2, 351	„ Cobalt-oxide....	5, 331
„ Chlorides, compounds		„ Cobalt-oxide	
of, with Hydrocyanic		and Soda ....	5, 344
acid....	8, 148	„ Cupric oxide....	5, 420
„ Chlorides, compounds		„ Ferric oxide....	5, 227
of Urea with ....	7, 372	„ Furfurine? ....	10, 379
„ Cyanides ....	7, 405	„ Lead-oxide ....	5, 131
„ Fluorides ....	2, 365	„ Lime ....	3, 196
„ Iodides ....	2, 268	„ Magnesia ....	3, 234
„ models for electroty-		„ Magnesia and	
ping ....	1, 507	Ammonia ....	3, 247
„ Nitrides ....	2, 494	„ Manganous	
„ Oxides ....	2, 39	oxide ....	4, 217
„ Phosphides ....	2, 151	„ Naphthyla-	
„ pyrometer (Daniell's)	1, 226	mine ....	14, 98
„ Salts, solubility of, in		„ Nickel-oxide	5, 369
alcohol ....	8, 265	„ Nickel-oxide	
„ Selenides ....	2, 454	and Soda ....	5, 386
„ Sulphides ....	2, 221	„ Potash ....	3, 30
„ thermometer (Breg-		„ Silver-oxide ....	6, 149
uet's) ....	1, 226	„ Silver-oxide	
Metalloids, classification of ....	2, 18	and Soda ....	6, 179
„ enumeration of ....	2, 1	„ of Soda ....	3, 95
Metals, development of elec-		„ Soda and Ba-	
tricity by combination		ryta ....	3, 165
of, with one another	1, 322	„ Strontia ....	3, 172
„ electric conducting pow-		„ Zinc-oxide ....	5, 18
ers of ....	1, 310	„ Zinc-oxide and	
„ enumeration of ....	2, 1	Ammonia ....	5, 37
„ finely divided, atomic		Metaphosphoric acid ....	2, 125
volumes of ....	1, 84	„ acid, modifica-	
„ galvanic precipitation		tions of ....	2, 133
of ....	1, 497	Metastylol ....	13, 6
„ their general properties		Metatartaric acid ....	10, 327
and classification ....	3, 1	Metatartrate of Ammonia	10, 328
„ relations between the		„ Baryta....	10, 329



Metatartrate of Lead ....	10, 329	Methyl, Butyrate ....	10, 90
„ Lime ....	10, 329	„ Caproate ....	11, 418
„ Magnesia ....	10, 329	„ Caprylate? ....	13, 199
„ Potash ....	10, 328	„ Carbolate ....	12, 261
„ Soda ....	10, 328	„ -cinchonidine ....	17, 233
„ Soda and Potash	10, 328	„ Cinnamate ....	13, 281
Metaterebenthene ....	14, 272	„ Citrates ....	11, 462
Metavaleraldide? ....	11, 20	„ Chloranisate ....	13, 136
Meteoric Iron ....	5, 395	„ Chloride ....7, 287; 13, 392	
„ Iron, cobalt in ....	5, 315	„ Chloride, chlorinated ....	7, 288
„ Iron, nickel in ....	5, 355	„ Chloride, decomposition	
Meteorites, carbonaceous sub-		at a red heat ....	10, 495
stance from ....	18, 172	„ Chloride, liquefaction of	10, 495
„ occurrence of mag-		„ Cholate ....	18, 56
netic oxide of iron in	5, 190	„ compounds, solubility of	
Metethamaniline ....	11, 332	in alcohol ....	7, 272
Metethamylamine ....	11, 108	„ Cyanate ....	8, 488
Metethaniline ....	11, 306	„ Cyanide .... 8, 60; 9, 294	
Methal ....	16, 209	„ Cyanide, compounds of,	
Methamaniline ....	11, 331	with metallic Chlorides	13, 412
Methamylic Ether ....	11, 8	„ Cyanurate ....	9, 458
„ Oxysulphocarbo-		„ Elaidate ....	17, 83
nates ....	11, 62	„ Erythrate ....	12, 372
Methaniline ....	11, 300	„ -ether, bichlorinated ....	7, 350
Methionates ....	8, 435	„ -ether, formic ....	7, 309
Methobiethylamylammonium	11, 110	„ -ether, hydriodic ....	7, 285
Methol....	9, 47; 13, 341	„ -ether, hydrobromic ....	7, 286
Methstannamyl ....	11, 132	„ -ether, hydrochloric ....	7, 287
Methstannbiamyl ....	11, 133	„ -ether, monochlorinated	7, 289
Methybinetrosalicylate of Ammo-		„ -ether, terchlorinated....	7, 354
nia ....	12, 318	„ Fluoride ....	7, 290
Methyl....	7, 247	„ Hydrated oxide ....	7, 258
„ Acetate ....	8, 484	„ Iodide....	7, 285
„ action of chlorine on		„ Iodide with Methylo-	
sulphides of ....	10, 500	piperidine ....	10, 451
„ action of heat on chlo-		„ Iodide, preparation of....	13, 451
ride of ....	12, 480	„ Lecanorate ....	12, 372
„ Alcohol and Ethers,		„ Malate ....	10, 227
expansion of, by heat		„ Mercurous, nitrate of....	13, 399
1, 226, 227, 228, 232		„ and Mercury, cyanide of	13, 412
„ Alcohol, mixtures of,		„ Mucate ....	11, 509
with ethyl-alcohol ....	8, 272	„ Nitranisate ....	13, 139
„ Alcohol, percentage of		„ Nitrate, action of alka-	
in aqueous wood-spirit	7, 267	line hydrates on ....	13, 388
„ Amidobenzoate ....	12, 146	„ Nitrite ....	9, 505
„ Anisate ....	13, 129	„ Nitrobenzoate....	12, 127
„ Arachidate ....	17, 373	„ Nitrotoluylate....	13, 24
„ -bases containing Ar-		„ Oleate....	17, 82
senic and Phosphorus	13, 492	„ Orsellate ....	12, 372
„ -bases containing Phos-		„ Oxalate ....	9, 174
phorus ....	7, 328	„ Oxide ....7, 256; 10, 489	
„ Benzoate ....	12, 56	„ Oxide, compound of,	
„ Benzamate ....	12, 147	with Zinc-methyl ....	13, 397
„ Biborate ....	7, 295	„ Oxide, sulphocarbonate of	7, 292
„ Bisulphide ....	7, 283	„ Palmitate ....	16, 373
„ Borate, terbasic ....	7, 294	„ -palmitic ether ....	16, 373
„ Bromacetate ....	12, 534	„ Phenate ....	12, 261
„ Bromanisate ....	13, 133	„ Protosulphide ....	6, 283
„ Bromide ....	7, 286	„ Pyrotartrate ....	11, 100

Methyl, Salicylate, neutral	.... 12, 258	Methylene, Bichloride	.... 7, 288
„ Sebate....	.... 14, 499	„ Bihydrate	.... 7, 258
„ Suberate	.... 13, 212	„ Bromide	.... 13, 391
„ Succinate	.... 10, 132	„ Chloride	.... 13, 391
„ Sulphides, action of chlorine on	.... 10, 500	„ Hydrate	.... 7, 256
„ Sulphide, compound of, with Mercuric Iodide	13, 450	„ Hydrobromate	.... 7, 286
„ Sulphide, sulphhydrate of	7, 284	„ Hydrochlorate	.... 7, 287
„ Sulphocarbonate	.... 7, 293	„ Hydrofluat	.... 7, 290
„ Sulphocyanide	.... 8, 121	„ Hydriodate....	.... 7, 285
„ Sulphocyanide, action of chlorine on	.... 10, 511	„ Indigotate	.... 12, 311
„ Stearate	.... 17, 114	„ Iodide	.... 13, 390
„ Tartrate	.... 10, 343	„ Mercaptan	.... 7, 284
„ Terbasic borate	.... 7, 294	„ Stannamyl	.... 11, 132
„ Terebilate	.... 12, 469	„ Stannethyl	.... 9, 99
„ Tersulphide	.... 7, 330	Methyl-ethylaniline	.... 11, 307
„ Ureo-carbonate	.... 7, 377	„ -ethylate of ethylene	.... 12, 520
„ Valerate	.... 11, 67	„ -ethylurea	.... 9, 291
Methyl-acetone	.... 13, 473	„ -hexyl	.... 11, 413
Methylal	.... 7, 310	„ -hyposulphuric acid	.... 2, 341
Methylamine	.... 7, 313	Methylic Alcohol	.... 7, 258
„ -alum	.... 13, 481	„ „ copulated acids produced by, with carbonic and sulphurous acids	.... 7, 224
„ compound of, with protochloride of platinum	.... 7, 318	„ „ preparation	.... 10, 490
„ Oxalates	.... 9, 172	„ „ relative position of atoms in....	7, 37
„ Salts	.... 7, 316	„ „ synthesis of	.... 12, 477
Methylamylaniline	.... 11, 331	„ Bisulphide, chloride of	10, 502
Methylaniline	.... 11, 300	„ Chloride, sulphite of bichlorinated	.... 7, 350
Methylate of Amyl	.... 11, 8	„ Ether	.... 7, 218, 256
„ Benzylene	.... 12, 221	„ „ relative position of atoms in....	7, 37
„ Ethyl	.... 8, 192	„ Formiate	.... 7, 309
„ Ethylene....	.... 12, 520	„ Nitrate	.... 7, 308
„ Octyl	.... 13, 198	„ Sulphate	.... 7, 304
Methyl-benzolic ether	.... 12, 201	„ Sulphide, bichlorinated	10, 501
„ -biethamylamine	.... 11, 110	„ „ monochlorinated	.... 10, 500
„ -bithionic acid	.... 12, 488	„ „ terchlorinated	7, 355
„ -bibromosalicylic acid	.... 12, 289	Methyl-irisine	.... 13, 253
„ -bichlorosalicylic acid	.... 12, 299	„ -lepidine	.... 14, 118
„ -binitrosalicylate of silver	12, 318	„ -lutidine	.... 12, 339
„ -binitrosalicylic acid	.... 12, 317	„ -morphine	.... 16, 439
„ -bromosalicylic acid	.... 12, 286	„ -nicotine	.... 14, 235
„ -brucine....	.... 17, 586	„ -nitrosalicylic acid	.... 12, 311
„ -camphoric acid....	.... 14, 463	„ -œnanthol	.... 13, 189
„ -caproyl ....	18, 564; 11, 413	„ -œnanthylic ether	.... 13, 198
„ -caprylic ether	.... 13, 198	„ -oxamic acid	.... 9, 261
„ -cinchonine	.... 17, 232	„ -oxamide	.... 9, 265
„ -ethyl-amylamine	.... 11, 108	„ -phosphate of soda	.... 9, 29
„ „ -amylaniline	.... 11, 332	„ -phosphoric acid	.... 12, 482
„ -chinoline	.... 13, 252	„ -phosphorous acid	.... 12, 481
„ -chloracetol	.... 13, 468	„ -piperidine	.... 10, 449
„ -chlorosalicylic acid	.... 12, 297	„ „ with iodide of methyl	.... 10, 451
„ -conine	.... 13, 170	„ „ urea....	.... 15, 16
Methylene	.... 7, 246		
„ Acetate	.... 8, 484; 13, 392		
„ Anilate	.... 12, 311		
„ Benzoate	.... 12, 56		

Methyl-plumbethyl ....	9, 106	Milk, preparation of lactic acid	
„ „ bromide ....	9, 108	from ....	11, 477
„ „ oxide ....	9, 107	„ supposed occurrence of al-	
„ -quinine....	17, 308	bumin in ....	18, 275, 307
„ -salicyl, benzoate ...	12, 258	„ of sulphur ....	2, 159
„ „ cuminate ....	14, 159	Milk-sugar ....	15, 217
„ „ hydrated ....	12, 255	„ aqueous ....	15, 225
„ „ succinate ....	12, 258	„ combinations of,	
„ -salicylate of Potash ...	12, 257	with acids and	
„ „ Baryta ....	12, 257	bases ....	15, 226
„ „ Soda ....	12, 257	„ crystallised ....	15, 224
„ -salicylic acid ....	12, 255	„ decomposition of,	
„ -selenious acid ....	10, 491	by acetic acid ....	15, 221
„ -stannethyl 9, 402 ;	13, 507	„ decomposition of,	
„ -strychnine ....	17, 506	by ammonia ....	15, 222
„ „ hydrate ....	17, 507	„ decomposition of,	
„ „ salts ....	17, 508	by arsenic and	
„ -ternitrosalicylic acid ...	12, 319	arsenious acid ....	15, 221
„ -tetrasulphuric acid ....	10, 497	„ decomposition of,	
„ -thialdine ....	12, 554	by bromine ....	15, 219
„ -triethylammonium ....	9, 69	„ decomposition of,	
„ -triethylium ....	9, 69	by butyric acid....	15, 221
„ -triethylphosphonium ....	12, 528	„ decomposition of,	
„ -uramine ....	9, 357	by chlorate of	
„ -urea ....	7, 375	potash and sul-	
Methysticine ....	18, 196	phuric acid ....	15, 221
Metœnanthol ....	12, 450	„ decomposition of,	
Metoleic acid ....	17, 88	by chlorine ....	15, 219
Metoluidine ....	12, 342	„ decomposition of,	
Mezereon bark, preparation of		by chromic acid	15, 219
daphnetin from	17, 175	„ decomposition of,	
„ preparation of		by cupric salts ....	15, 222
daphnin from	17, 177	„ decomposition of,	
Miargyrite ....	6, 191	by dry distilla-	
Miasmata, disengagement of	2, 415	tion ....	15, 219
Mica, artificial....	3, 424	„ decomposition of,	
„ biaxial, or potash ....	3, 449	by fermentation	15, 223
„ -slate ....	3, 451	„ decomposition of,	
„ uniaxial, or magnesia ....	3, 422	by heat....	15, 218
Microcosmic salt ....	3, 118	„ decomposition of,	
Microline ....	3, 442	by heating in the	
Middletonite ....	17, 440	air ....	15, 219
Miemite ....	3, 253	„ decomposition of,	
Mignonette oil ....	14, 383	by heating with	
Mild alkalis ....	3, 3	water ....	15, 219
„ mineral alkali ....	3, 78	„ decomposition of,	
„ vegetable alkali ....	3, 14	by hydrochloric	
Milk, coagulation of, by rennet	18, 312	acid ....	15, 221
„ „ by metallic		„ decomposition of,	
salts ....	18, 315	by iodic acid ....	15, 221
„ of the Cow-tree ....	17, 351	„ decomposition of,	
„ <i>Hura crepitans</i> ....	17, 352	by iodine ....	15, 219
„ lime ....	3, 183	„ decomposition of,	
„ phenomena exhibited by,		by lead-oxide ....	15, 223
during fermentation ....	7, 103	„ decomposition of,	
„ precipitation of, by alco-		by mercuric	
hol ....	18, 318	oxide ....	15, 223
„ precipitation of casein from,		„ decomposition of,	
by acids ....	18, 314	by nitrate of	



	silver, and nitrate of argentammonium ....	15, 223	Mixture, formation of chemical compounds by ....	1, 86
Milk-sugar,	decomposition of, by nitric acid ....	15, 220	„ nature of ....	1, 20
„	decomposition of, by nitrosulphuric acid ....	15, 221	Models for electrotyping, metallic „ for electrotyping, non-metallic ....	1, 507 1, 508
„	decomposition of, by oxidation in contact with spongy platinum ....	15, 219	Mohs' crystallographic nomenclature ....	1, 17
„	decomposition of, by permanganate of potash ....	15, 222	<i>Moiré metallique</i> ....	1, 19
„	decomposition of, by phosphoric acid ....	15, 221	Molecular rotatory power ....	15, 245
„	decomposition of, by potash ....	15, 222	<i>Molécules intégrantes et soustrac-</i>	
„	decomposition of, by potassium ....	15, 222	<i>tives</i> ....	1, 19
„	decomposition of, by sodium ....	15, 222	<i>Mollusca</i> , phosphorescence of ....	1, 182
„	decomposition of, by sulphuric acid ....	15, 221	Molybdates ....	4, 56
„	decomposition of, by tartaric acid ....	15, 221	Molybdate of Ammonia ....	4, 66
Milky sap of <i>Tabernamontana utilis</i> ....	....	17, 351	„ Antimonic oxide....	4, 390
Millefoil oil ....	....	14, 384	„ Auric oxide ....	6, 237
Millon's mercury-solution, re-	action of, with proteides ....	18, 262	„ Baryta ....	4, 75
Miloschine ....	....	3, 413	„ Bismuth-oxide ....	4, 448
Mine-gas ....	....	7, 249	„ Cadmic oxide ....	5, 65
Mineral alkali ....	....	3, 74	„ Cerous oxide ....	4, 77
„ alkali, mild ....	....	3, 78	„ Chromic oxide ....	4, 156
„ blue ....	....	5, 415	„ Cobalt-oxide ....	5, 347
„ chameleon ....	....	4, 233	„ Cupric oxide ....	5, 467
„ green ....	....	5, 414	„ Ethylamine ....	13, 481
„ kermes ....	....	4, 340	„ Ferric oxide ....	5, 297
„ turbite ....	....	6, 28	„ Lead-oxide ....	5, 167
Minerals, action of oxalic acid on	13, 515		„ Lime ....	4, 76
Mine-tin, Bohemian and Saxon....	5, 67		„ Magnesia ....	4, 77
Minium ....	5, 118		„ Manganous oxide ....	4, 246
„ solution of, in strong vinegar ....	8, 320		„ Mercurous oxide....	6, 112
Mirror-glass ....	3, 380		„ Nickel-oxide ....	5, 387
Mispickel ....	5, 309		„ Potash ....	4, 69
Mitis green ....	8, 329		„ Silver-oxide ....	6, 183
Mitscherlich's system of crystallography ....	1, 16		„ Soda ....	4, 73
„ theory of isomorphism ....	1, 98		„ Stannic oxide ....	5, 101
Mixed gases, absorption of, by water ....	2, 67		„ Strontia ....	4, 76
„ vapours, tension of ....	1, 265		„ Terchloride of Molybdenum ....	4, 64
Mixture and Combination, difference between....	1, 149		„ Thorina ....	4, 78
			„ Uranic oxide ....	4, 193
			„ Uranous oxide ....	4, 193
			„ Vanadic oxide ....	4, 104
			„ Yttria ....	4, 78
			„ Zinc-oxide ....	5, 47
			„ Zinc-oxide and Ammonia ....	5, 48
			„ Zinc-oxide and Potash ....	5, 48
			Molybdenum ....	4, 48
			„ Acetate ....	8, 305
			„ alloys ....	4, 80
			„ blue oxide of ....	4, 53
			„ Chlorides ....	4, 63
			„ compounds, solubility of, in alcohol ....	8, 269
			„ glance ....	4, 59
			„ olive-green oxide ....	4, 53

Molybdenum Oxalates ....	9, 136	Molybdic oxide and Soda, Carbo-	
„ in pig-iron ....	5, 297	„ nate of ....	4, 73
„ Succinate ....	10, 122	„ oxide and Soda, Hy-	
„ Sulphocyanide ....	8, 85	„ drofluat of....	4, 74
„ Terchloride, Mo-		„ salts ....	4, 52
„ lybdate of ....	4, 64	„ Sulpharsenite ....	4, 312
„ and Copper, alloy		„ Sulphide ....	4, 59
„ of ....	5, 467	Molybdide of Iron ....	5, 297
„ and Gold, alloy		„ Lead ....	5, 167
„ of ....	6, 237	Molybdous Chloride ....	4, 63
„ and Iron, Cyanides		„ oxide ....	4, 49
„ of ....	7, 487	„ oxide, Arseniate of ....	4, 311
„ and Platinum, alloy		„ oxide, Borate of ....	4, 57
„ of ....	6, 331	„ oxide, Hydriodate of ....	4, 63
„ and Silver, alloy		„ oxide, Hydrofluat of ....	4, 65
„ of ....	6, 183	„ oxide, Nitrate of ....	4, 66
Molybdic acid ....	4, 55	„ oxide, Silicate of ....	4, 78
„ acid, Arseniate of ....	4, 311	„ oxide, Sulphates of....	4, 62
„ acid, Borate of ....	4, 58	„ oxide, Tartrate of ....	10, 293
„ acid, Chromate of ....	4, 156	„ oxide and Ammonia,	
„ acid with Fluxes ....	4, 73	„ Carbonate of ....	4, 68
„ acid, Hydrochlorate		„ oxide and Ammonia,	
„ of ....	4, 65	„ Hydrochlorate of....	4, 69
„ acid, Hydrofluat of....	4, 65	„ oxide and Ammonia,	
„ acid, Nitrate of ....	4, 66	„ Hydrofluat of ....	4, 69
„ acid, Sulphates of ....	4, 62	„ oxide and Ammonia,	
„ acid, Tartrate of ....	10, 293	„ Phosphate of ....	4, 68
„ acid and Silica, Hy-		„ oxide and Potash,	
„ drofluat of....	4, 79	„ Hydrochlorate of ....	4, 72
„ chloride ....	4, 63	„ oxide and Potash,	
„ oxide....	4, 51	„ Hydrofluat of ....	4, 72
„ oxide, Arseniate of ....	4, 311	„ oxide and Silica, Hy-	
„ oxide, Borate of ....	4, 57	„ drofluat of ....	4, 79
„ oxide, Chromates of....	4, 156	„ oxide and Soda, Hy-	
„ oxide, Hydrochlorate		„ drofluat of ....	4, 74
„ of ....	4, 64	„ salts ....	4, 51
„ oxide, Hydrofluat of ....	4, 65	„ Sulphide ....	4, 59
„ oxide, Hydriodate of....	4, 63	Monatomic gases ....	1, 53
„ oxide, Nitrate of ....	4, 66	Monazite ....	3, 265
„ oxide, Silicate of ....	4, 78	Monoacetin ....	9, 496
„ oxide, Sulphate of ....	4, 62	„ Glycolic ....	13, 429
„ oxide, Tartrate of ....	10, 293	Monoarachin ....	17, 373
„ oxide, Tungstate of ....	4, 79	Monobenzoïcïn ....	12, 104
„ oxide and Ammonia,		Monobromacetone ....	13, 464
„ Carbonate of ....	4, 68	Monobromhydrin ....	13, 574
„ oxide and Ammonia,		Monobutyryn ....	10, 93
„ Hydrofluat of ....	4, 69	Monochloracetal ....	13, 477
„ oxide and Ammonia,		Monochloracetamide ....	12, 541
„ Tungstate of ....	4, 79	Monochloracetate of Ethyl ....	12, 540
„ oxide and Potash, Car-		Monochloracetates, metallic ....	12, 537
„ bonate of ....	4, 70	Monochloracetic acid 9, 192; 12, 537	
„ oxide and Potash, Hy-		„ ether ....	12, 540
„ drofluat of....	4, 72	Monochloracetone ....	13, 463
„ oxide and Potash, Sul-		Monochlorhydrin ....	9, 498
„ phate of ....	4, 72	Monochlorinated Hydrochloric	
„ acid and Potash, Tar-		„ ether ....	8, 375
„ trate of ....	10, 293	„ Methyl-ether....	7, 289
„ oxide and Silica, Hy-		„ Methylic sul-	
„ drofluat of....	4, 79	„ phide ....	10, 500

Monochlorinated Vinic ether ....	9, 192	Morphine, Picrate ....	16, 436
Monochlorometaldehyde ....	12, 536	„ precipitation of, by	
Monolein ....	17, 84	fluosilicic alcohol,	
Monopalmitin ....	16, 376	phosphantimonic,	
Monophocenin ....	11, 75	phosphomolybdic,	
Monosaccharides ....	15, 317	and phosphotungstic	
Monostearin ....	17, 117	acids, chloride of	
Monovalerin ....	11, 75	cadmium, and chro-	
Moonlight, heat of ....	1, 166	mate of potash ....	16, 432
Mordants, use of, in dyeing ....	15, 141	„ precipitation of, by	
Morels, oil of ....	17, 97	mercuric nitrate ....	16, 433
Morin ....	15, 477	„ preparation of ....	16, 416
Morindin ....	16, 190	„ purification of ....	16, 418
Morindine ....	16, 189	„ Pyrotartrate ....	16, 436
<i>Moringa oleifera</i> , oil of ....	16, 386	„ reactions of, with hy-	
Moringic acid ....	17, 74	pochlorites, chlo-	
Morintannates, metallic ....	15, 475	rine-water, and chlo-	
Moritannate of Quinine ....	17, 293	rate of potash ....	16, 535
Moritannic acid ....	15, 473	„ reaction of, with sul-	
Morphia, <i>see</i> Morphine.		phuric acid and fer-	
Morphine, Acetate ....	16, 434	ric chloride ....	16, 535
„ Aspartate ....	16, 435	„ Rhodizonate ....	16, 436
„ Betuloretate ....	17, 404	„ solutions of ....	16, 429, 437
„ Carbonate ....	16, 430	„ sources of ....	16, 414
„ Chlorate ....	16, 431	„ Sulphate ....	16, 430
„ Chloromercurate ....	16, 433	„ Tannate ....	16, 436
„ Chloroplatinate ....	16, 433	„ Tartrate ....	16, 435
„ composition and pro-		„ Urate ....	16, 436
perties of ....	16, 424	„ Valerate ....	16, 436
„ compounds of, with		Morphium ....	16, 414
Alkalis ....	16, 437	Mortar, common ....	3, 392
„ compounds of, with		„ hydraulic ....	3, 389
Organic oxides ....	16, 437	Mosaic Gold ....	5, 79, 479
„ Croconate ....	16, 436	Mosandrite ....	3, 488
„ crystallised....	16, 424, 429	Mottled Pig-iron ....	5, 212
„ Cyanurate ....	16, 435	Mountain-ash berries, preparation	
„ decomposition of ....	16, 424	of Malic acid from....	10, 208
„ detection of, with		„ -ash, wax from the fruit	
sulphuric and ni-		of ....	18, 161
tric acids ....	16, 534	„ blue ....	5, 415
„ estimation of, in		„ butter ....	5, 276
opium ....	16, 423	„ green ....	8, 329
„ Formiate ....	16, 433	Mucamide ....	11, 523
„ Hippurate ....	16, 436	Mucate of Ammonia ....	11, 504
„ Hydriodate....	16, 431	„ Ethyl ....	11, 510
„ Hydrochlorate ....	16, 431	„ Methyl ....	11, 509
„ Hydrocyanate, with		Mucates, metallic ....	11, 505
Cyanide of Plati-		Mucedin of Rye ....	18, 444
num ....	16, 433	„ Wheat ....	18, 443
„ Hydrofluuate ....	16, 432	Mucic acid ....	11, 502
„ Hyposulphite ....	16, 430	„ acid, copulated acids pro-	
„ Hydrosulphocyanate	16, 434	duced by ....	7, 227
„ Kinate ....	16, 436	Mucilage, vegetable ....	15, 209
„ Meconate ....	16, 436	Mucin of connective tissue ....	18, 341
„ Mellitate ....	16, 435	Mucin, from mucous animal	
„ memoirs relating to	16, 413	fluids ....	18, 340
„ Nitrate ....	16, 432	„ of the salivary glands ....	18, 345
„ Perchlorate....	16, 431	„ of snails ....	18, 340
„ Phosphate ....	16, 430	„ vegetable ....	18, 424, 443



- Mucous fermentation .... 7, 99  
 Mucus, animal, only partly agree-  
     ing with mucin .... 18, 344  
     " of the gall-bladder .... 18, 345  
     " of *Limax agrestis* .... 18, 344  
     " of the nose and respira-  
         tory passages .... 18, 346  
     " peptone .... 18, 344  
     " vegetable .... 15, 209  
 Mudarin .... 18, 235  
 Mugwort oil .... 14, 385  
 Mulder's derivatives of pro-  
     tein substances .... 18, 263  
     " researches on pro-  
         teides .... 18, 252  
 Multiplier, electric .... 1, 317  
*Murex brandaris* and *M. trun-*  
*culus*, colouring matter of .... 18, 421  
 Murexan .... 10, 203  
 Murexide .... 10, 192  
     " decompositions of .... 10, 195  
     " preparation of, from  
         alloxan, alloxantin,  
         uramil .... 10, 194  
     " preparation of, from  
         uric acid .... 10, 193  
     " properties of .... 10, 195  
 Muriate of Ammonia .... 2, 478  
     " of Mercury .... 6, 53  
 Muriates .... 2, 353  
     " hypothetically anhy-  
         drous .... 2, 351  
 Muriatic acid .... 2, 319  
     " acid, dephlogisticated  
         or oxygenated .... 2, 289  
     " ether .... 8, 368  
 Murrayetin .... 18, 235  
 Murrayin .... 18, 235  
*Musa ferrea*, oil of the fruit of 17, 97  
 Muscle fibrin .... 18, 268  
     " of the heart, preparation  
         of Inosite from .... 15, 352  
     " plasma, preparation of .... 18, 267  
     " plasma, preparation of  
         Myosin from .... 18, 267  
     " serum .... 18, 267  
 Muscular flesh, occurrence of  
     inosinic acid in .... 11, 119  
     " flesh, putrefaction of 7, 104  
 Musculin .... 18, 268  
 Musical notes produced by a hy-  
     drogen flame in a glass tube .... 2, 58  
 Mussel shells, conchiolin obtain-  
     ed from .... 18, 371  
 Mustard, fatty oils of black and  
     white .... 17, 553  
     " oil .... 10, 41  
     " oil, fatty preparation  
         of erucic acid from .... 17, 549  
 Mustard oil, formation of .... 10, 50  
     " oils related to oil of .... 10, 54  
     " oil, with Sulphide of  
         Barium .... 10, 49  
     " oil, with Sulphide of  
         Potassium .... 10, 49  
     " and Garlic oils, mix-  
         tures of .... 10, 56  
     " peculiar acid obtained  
         from .... 10, 57  
     " white, acrid principle of 14, 527  
 Mutton fat .... 16, 394  
 Mycomelate of Ammonia .... 10, 183  
     " Silver .... 10, 183  
 Mycomelic acid .... 10, 182  
 Mycose .... 15, 301  
 Myelin forms .... 18, 374  
 Myle .... 11, 1  
 Myosin .... 18, 266  
     " formation of syntonin  
         from .... 18, 268  
 Myrica tallow .... 16, 394  
 Myricin .... 18, 153  
 Myricyl alcohol .... 18, 150  
 Myristate of Benzoyl .... 16, 216  
     " Ethyl .... 16, 215  
 Myristates, metallic .... 16, 212  
 Myristearin, *see* Myristin.  
 Myristic acid .... 16, 209  
     " anhydride .... 16, 217  
     " ether .... 16, 215  
     " and Lauric acids, melt-  
         ing points of mixtures  
         of .... 16, 214  
     " Lauric, and Palmitic  
         acids, melting and  
         solidifying points of  
         mixtures of .... 16, 364  
     " and Margaric acids,  
         melting points of mix-  
         tures of .... 16, 473  
     " Palmitic, and Stearic  
         acids, melting points  
         and mode of solidifi-  
         cation of mixtures of 17, 114  
     " and Stearic acids, melt-  
         ing points and mode  
         of solidification of mix-  
         tures of .... 17, 113  
 Myristica, fats from various  
     species of .... 16, 395  
     " *sebifera*, tallow of 16, 396  
 Myristin .... 16, 315  
     " composition of .... 7, 238  
 Myristyl Hydride, *see* Tetra-  
     catyl Hydride.  
 Myronate of Potash .... 15, 346, 418  
 Myronic acid .... 10, 53  
 Myrosin .... 10, 54

<i>Myrospermum toluiferum</i> , Tolu				Myrrh ....	....	....	17, 425
balsam obtained from	....	17, 392		„ oil of	....	....	14, 413
Myroxocarpin ....	....	13, 289		Myrtle-oil	....	....	14, 385
<i>Myroxylon peruiferum</i> , Peru				„ -wax	....	....	16, 394
balsam from,...	....	17, 389		Mysoline	....	....	5, 414

## N.

Nacrite ....	....	3, 418		Naphthulmin ....	....	14, 26
Nails, composition of	....	18, 348		Naphthyl, Bromide of, <i>see</i> Bro-		
Napelline ....	....	18, 177		monaphthalin.		
Naphtha....	....	12, 438		„ Cyanite ....	....	14, 118
„ crude or light	....	11, 135		„ Sulphocyanide	....	14, 119
„ heavy	....	11, 135		Naphthylamine	....	14, 93
<i>Naphtha vitrioli</i>	....	8, 171		„ acid from	....	13, 352
Naphthalase	....	14, 25		„ salts of	....	14, 99
Naphthalese, binitrite of, <i>see</i>				Naphthylcarbamide	....	14, 119
Binitronaphthalin.				Naphthylsulphurous Chloride	....	14, 505
Naphthalidam? <i>see</i> Naphthyla-				Naphthyl-urea ....	....	14, 119
mine.				<i>Naphtum</i> , <i>see</i> Naphthalin.		
„ -carbamide, <i>see</i>				Naples yellow ....	....	5, 175
Carbonaphtha-				Narceine ....	....	17, 597
lide.				„ salts	....	17, 600
„ sulphocarbamide,				Narcitin ....	....	18, 236
<i>see</i> Sulphocar-				Narcogenine ....	....	16, 149
bonaphthalide.				Narcotic vitriol salt	....	2, 97
Naphthalin ....	....	14, 1		Narcotinate of Potash....	....	16, 148
„ chloride of, Lau-				Narcotine ....	....	16, 135
rent's	....	14, 58		„ decomposition of, by		
„ combinations of	....	14, 9		bromine and chlo-		
„ decompositions of...	14, 7			rine	....	16, 139
„ formation of, in the				„ decomposition of, by		
decomposition of				dilute sulphuric acid		
organic bodies by				and peroxide of		
heat	....	14, 2		manganese	....	16, 141
„ hydrocarbons iso-				„ decomposition of, by		
meric with, ob-				electrolysis	....	16, 139
tained by the dry				„ decomposition of, by		
distillation of the				ethyl iodide	....	16, 142
benzoates	....	14, 11		„ decomposition of, by		
„ natural	....	18, 249		heat	....	16, 138
„ preparation of, from				„ decomposition of, by		
coal-tar	....	14, 3		heating in contact		
„ production of, in				with air	....	16, 139
the dry distillation				„ decomposition of, by		
of coal	....	7, 84		hydriodic acid	....	16, 140
„ properties of	....	14, 5		„ decomposition of, by		
„ purification of	....	14, 5		hypochlorite of soda	16, 352	
Napthalocyanic acid	....	14, 118		„ decomposition of, by		
Naphthameine, <i>see</i> Oxynaphthy-				hyponitric acid	....	16, 140
lamine.				„ decomposition of, by		
Naphthase, <i>see</i> Naphthalase.				heating with water		
Naphthene ....	....	13, 368		in a sealed tube	....	16, 139
Naphthesic acid	....	14, 27		„ decomposition of, by		
Naphthionamite	....	14, 507		mercurioso-mercuric		
Naphthionates ....	....	14, 112		nitrate	....	16, 142
Naphthionic acid	....	14, 110		„ decomposition of, by		
Naphthol ....	....	15, 39		nitric acid	15, 140, 532	

- Narcotine, decomposition of, by  
 platinic chloride .... 16, 142  
 „ decomposition of, by  
 potash .... 16, 141  
 „ decomposition of, by  
 red prussiate of pot-  
 ash .... 16, 142  
 „ decomposition of, by  
 sulphuric acid 16, 140, 532  
 „ decomposition of, by  
 sulphuric acid and  
 ferric chloride .... 16, 532  
 „ memoirs relating to 16, 135  
 „ occurrence of, in  
 opium .... 16, 136  
 „ precipitation of, by  
 picric acid .... 15, 146  
 „ preparation of .... 16, 136  
 „ preparation of cotar-  
 nine from .... 16, 130  
 „ properties of .... 16, 137  
 „ in the root of *Aconi-*  
*tum napellus* .... 18, 175  
 „ salts .... 16, 142  
 „ solutions of.... 16, 142, 146  
 Narthecin .... 18, 236  
 Narthecium, colouring matter  
 and poisonous  
 principle of .... 18, 237  
 „ resin-acid of .... 18, 237  
 Nasturtium, oil of .... 14, 385  
 Native soda .... 3, 78  
*Natrium* .... 3, 73  
 Natron.... 3, 74  
*Natronium* .... 3, 73  
*Natrum* .... 3, 74  
 „ *vitriolatum* .... 3, 39  
 Natural science, scope of .... 1, 1  
 „ steel .... 5, 208  
 Naumann's crystallographic  
 nomenclature .... 1, 17  
 Neck-band of the ox, preparation  
 of leucine from ... 11, 429  
*Nectandra Rodiaei*, preparation  
 of bebirine from the bark of 17, 170  
 Needle iron-ore .... 5, 197  
 Needle-ore .... 5, 488  
 Neolite .... 3, 398  
 Nepheline .... 3, 431  
 Nephrite .... 3, 451  
*Nereis*, phosphorescence of .... 1, 185  
*Nereum Oleander*, alkaloids ob-  
 tained from .... 17, 596  
 Neroli-camphor .... 14, 387  
 „ oil .... 14, 386  
 Neurine (choline) preparation of,  
 from pig's bile .... 18, 380  
 „ preparation of, from pro-  
 togon .... 18, 379  
 Neurine (choline) produced by  
 decomposition of leci-  
 thine with baryta-  
 water ... 18, 379  
 „ salts of .... 18, 381  
 „ synthesis of .... 18, 379  
 Neutralization .... 1, 97  
 „ Richter's law  
 of .... 1, 120  
 Neuwieder green .... 8, 329  
 Newton: his researches on at-  
 traction and light .... 1, 4  
 Niccolate of Ammonia .... 5, 379  
 „ Baryta .... 5, 386  
 „ Ferrous oxide .... 5, 396  
 „ Lime .... 5, 386  
 „ Magnesia .... 5, 386  
 „ Potash .... 5, 384  
 „ Soda .... 5, 385  
 „ Strontia .... 5, 386  
 Niccolo-cupric sulphate .... 5, 497  
 „ -iodate of Ammonia .... 5, 382  
 „ -nitrate of Ammonia .... 5, 384  
 „ -sulphate of Ammonia .... 5, 381  
*Niccolum* .... 5, 355  
 Nickel .... 5, 354  
 „ Acetate .... 8, 323  
 „ Alloxanate .... 10, 167  
 „ Alloys .... 5, 397  
 „ Aluminate .... 5, 386  
 „ Amalgam .... 6, 130  
 „ Ammonio-bromate .... 5, 383  
 „ „ -bromide .... 5, 382  
 „ „ -chloride .... 5, 383  
 „ „ -cobaltidcyanide 7, 501  
 „ „ -ferridcyanide 7, 500  
 „ „ -ferrocyanide.... 7, 500  
 „ „ -hyposulphate 5, 380  
 „ „ -hyposulphite 5, 380  
 „ „ -iodide .... 5, 381  
 „ „ -sulphate .... 5, 381  
 „ „ -sulphocyanide 8, 90  
 „ Amylosulphate.... 11, 59  
 „ Antimoniate .... 5, 393  
 „ Antimonide .... 5, 392  
 „ Argentocyanide .... 8, 33  
 „ Arseniate .... 5, 390  
 „ -arsenic glance.... 5, 491  
 „ Arsenides .... 5, 388  
 „ Arsenite .... 5, 390  
 „ Aspartate .... 10, 237  
 „ Azelaate .... 17, 81  
 „ Benzoate .... 12, 43  
 „ Biethylphosphate .... 8, 402  
 „ Bisulphide .... 5, 371  
 „ „ with antimo-  
 nide of nickel .... 5, 393  
 „ Bisulphide with proto-  
 arsenide of nickel .... 5, 391



Nickel, black earthy ....	5, 365	Nickel, Picrate ....	11, 226
„ Borate ....	5, 368	„ Platinocyanide with am-	
„ Bromate ....	5, 377	„ monia ....	8, 55
„ Bromide ....	5, 376	„ Plumbite ....	5, 394
„ Camphorate ....	14, 461	„ Protoarsenide with bi-	
„ Carbide ....	5, 366	„ sulphide of nickel ....	5, 391
„ Carbonate ....	5, 366	„ Protosulphide ....	5, 370
„ Chlorate ....	5, 378	„ Protoxide ....	5, 362
„ Chloride ....	5, 377	„ Pyrites, white ....	5, 389
„ „ with Cyanide		„ Pyromucate ....	10, 385
„ of Mercury ....	8, 26	„ Pyrophosphate ....	5, 369
„ Chloropalladite ....	6, 357	„ Pyrotartrate ....	11, 97
„ Chloroplatinate ....	6, 337	„ Racemate ....	10, 359
„ Chromate ....	5, 387	„ reactions of ....	5, 363
„ Citrate ....	11, 459	„ reduced by hydrogen,	
„ Cobaltidecyanide ....	7, 500	„ effect of, in inducing the	
„ Croconate ....	10, 394	„ combination of oxygen	
„ Cuprocyanide ....	8, 11	„ and hydrogen ....	2, 53
„ Cyanide ....	7, 49	„ Rhodizonate ....	10, 403
„ Disulphide ....	5, 369	„ salts ....	5, 363
„ Ferridecyanide ....	7, 500	„ „ solubility of, in al-	
„ Ferrite ....	5, 396	„ cohoh ....	8, 271
„ Ferrocyanide ....	7, 499	„ Sarcolactate ....	11, 500
„ Fluoride ....	5, 379	„ Seleniate ....	5, 374
„ Formiate ....	7, 281	„ Selenite ....	5, 374
„ Fumarate ....	10, 30	„ separation of, from cobalt	
„ Gallate ....	12, 411		5, 319, 360
„ Hippurate ....	12, 80	„ Styphnate ....	11, 234
„ Hydrate ....	5, 363	„ Succinate ....	10, 127
„ Hydriodate ....	5, 375	„ Sulphantimoniate ....	5, 393
„ Hydrobromate ....	5, 576	„ Sulpharseniate ....	5, 392
„ Hydrochlorate ....	5, 378	„ Sulpharsenite ....	5, 392
„ Hydrosulphate ....	5, 371, 373	„ Sulphate ....	5, 373
„ Hypophosphite ....	5, 368, 371	„ Sulphides ....	5, 369
„ Iodate ....	5, 376	„ Sulphite ....	5, 372
„ Iodide ....	5, 374	„ Sulphocarbonate ....	5, 374
„ Itaconate ....	10, 427	„ Sulphocyanide ....	8, 90
„ Kinate ....	16, 232	„ Sulphomolybdate ....	5, 387
„ Lactate ....	11, 492	„ Sulphotellurate ....	5, 393
„ Maleate ....	8, 158	„ Sulphotungstate ....	5, 387
„ Mellitate ....	10, 9	„ Sulphovinate ....	8, 427
„ Metaphosphate ....	5, 369	„ Tellurate ....	5, 393
„ Methylobithionate ....	12, 489	„ Tellurite ....	5, 393
„ Molybdate ....	5, 387	„ Tungstate ....	5, 386
„ Nitrate ....	5, 379	„ Valerate ....	11, 36
„ Nitride ? ....	5, 379	„ Vanadiate ....	5, 387
„ Oleate ....	17, 73	„ and Aluminium, fluoride of	5, 386
„ Oxalate ....	9, 163	„ and Ammonium, carbon-	
„ „ with ammonia ....	9, 163	„ ate of ....	5, 379
„ Oxide ....	5, 362	„ and Ammonium, chloride	
„ „ with fluxes ....	5, 385	„ of ....	5, 383
„ Oxychloride ....	5, 378	„ and Ammonium, cyanide	
„ Oxyfluoride ....	5, 379	„ of ....	7, 498
„ Oxyiodide ? ....	5, 375	„ and Ammonium, fluoride	
„ Peroxide ....	5, 365	„ of ....	5, 384
„ Persulphomolybdate ....	5, 387	„ and Ammonium, hydro-	
„ Phosphate ....	5, 369	„ sulphate of ....	5, 380
„ Phosphide ....	5, 368	„ and Ammonium, phos-	
„ Phosphite ....	5, 368	„ phate of ....	5, 380

Nickel and Ammonium, race-				Nicotine, Iodate	....	....	14, 227
mate of	....	....	10, 381	„ with Mercuric Chloride	....	....	14, 228
„ and Ammonium, sulphate				„ with Mercuric Chloride			
of	....	....	5, 381	and Cyanide	....	....	14, 229
„ and Bismuth, alloy of	....	....	5, 393	„ with Mercuric Iodide	....	....	14, 228
„ „ sulphide of	....	....	5, 393	„ Nitrate	....	....	14, 227
„ and Cobalt, alloy of	....	....	5, 397	„ with Nitrate of Silver	....	....	14, 229
„ „ cyanide of	....	....	7, 500	„ Oxalate	....	....	14, 231
„ and Copper, alloy of	....	....	5, 497	„ Phosphate	....	....	14, 227
„ „ cyanide of	....	....	8, 11	„ preparation of	....	....	14, 221
„ Copper, and Potassium,				„ Purpurate	....	....	14, 232
sulphate of	....	....	5, 497	„ sources of	....	....	14, 220
„ Copper, and Zinc, alloy				„ Sulphate	....	....	14, 227
of	....	....	5, 497	„ Tartrate	....	....	14, 232
„ and Gold, alloy of	....	....	6, 246	Nigella oil	....	....	14, 388
„ „ chloride of	....	....	6, 246	<i>Nigella sativa</i> , oil of the seeds			
„ and Iron, alloys of	....	....	5, 394	of	....	....	17, 97
„ „ carbide of	....	....	5, 396	Nigellin	....	....	18, 237
„ „ sulphate of	....	....	5, 397	Nigrine	....	....	5, 291
„ „ sulphide of	....	....	5, 396	<i>Nilium album</i>	....	....	5, 5
„ and Lead, alloy of	....	....	5, 394	Ninaphase, <i>see</i> Nitronaphthalin.			
„ and Magnesium, phos-				Ninaphtese, <i>see</i> Binitronaphtha-			
phate of	....	....	5, 386	lin.			
„ and Mercury, chloride of	....	....	6, 130	Ninaphthalidine, <i>see</i> Ninaphthyl-			
„ and Palladium, alloys of	....	....	6, 357	amine.			
„ and Platinum, alloy of	....	....	6, 337	Ninaphthylamine	....	....	14, 106
„ and Potassium, cyanide of	....	....	7, 498	Ninaphtin, <i>see</i> Nitronaphthalese.			
„ „ fluoride of	....	....	5, 385	Ninaphtise, <i>see</i> Ternitronaph-			
„ „ sulphate of	....	....	5, 384	thalin.			
„ and Silicium, hydrated				Niobates	....	....	4, 17
fluoride of	....	....	5, 386	Niobic acid	....	....	4, 16
„ and Silver, alloy of	....	....	6, 196	„ sulphate of	....	....	4, 18
„ and Sodium, metaphos-				Niobium	....	....	4, 15
phate of	....	....	5, 385	„ Chloride	....	....	4, 18
„ and Tin, alloy	....	....	5, 394	„ Sulphide	....	....	4, 18
„ and Uranium, acetate of	....	....	13, 445	Nitacrol	....	....	9, 502
„ and Zinc, alloy of	....	....	5, 394	Nitramidin	....	....	15, 106
„ „ sulphate of	....	....	5, 394	Nitraniline	....	....	9, 288
„ -bismuth-glance	....	....	5, 393	„ $\alpha$ , preparation of, by			
„ -glance	....	....	5, 391	reduction of bini-			
Nickeliferous grey antimony	....	....	5, 393	trobenzene	....	....	11, 288
Nickel-ochre	....	....	5, 390	„ $\beta$ , preparation of,			
„ -silver	....	....	5, 497	from pyrotartoni-			
<i>Nicotiana Tabacum</i> , oil from the				tranil	....	....	11, 288
seeds of	....	....	16, 314	„ -urea	....	....	11, 304
Nicotianine	....	....	14, 232	Nitran	....	....	2, 16
Nicotinic acid	....	....	10, 229	Nitranisate of Ethyl	....	....	13, 140
Nicotine	....	....	14, 219	„ Methyl	....	....	13, 139
„ Acetate	....	....	14, 231	Nitranisates, metallic	....	....	13, 138, 585
„ aqueous	....	....	14, 226	Nitranisic acid	....	....	13, 137
„ Chloromercurate	....	....	14, 229	Nitraniside	....	....	14, 218
„ Chloroplatinate	....	....	14, 231	Nitranisidine	....	....	12, 266
„ Chloroplatinite	....	....	14, 230	Nitranisol	....	....	12, 263
„ decompositions of	....	....	14, 224	Nitranisyl, chloride	....	....	13, 142
„ estimation of, in to-				Nitrates	....	....	2, 400
bacco	....	....	14, 223	Nitrate of Acetamide	....	....	12, 545
„ formation of	....	....	14, 220	„ Acetostannethyl	....	....	9, 102
„ hydrated	....	....	14, 226	„ Acetylium	....	....	10, 539
„ Hydrochlorate	....	....	14, 227	„ Alanine	....	....	9, 436

Nitrates, alkaline, electrolysis of	1, 461	Nitrate of Cupric oxide	.... 5, 446
Nitrate of Alumina	.... 3, 318	„ Cyanethine....	.... 13, 236
„ Amarine	.... 12, 196	„ Cyaniline	.... 11, 361
„ Amidobenzoic acid	.... 12, 145	„ Cystine	.... 9, 441
„ Amidonitraniline	.... 11, 295	„ Didymium	.... 3, 281
„ Ammeline	.... 9, 475	„ Diplatinamine	6, 311, 316
„ „ and Silver	9, 476	„ Diplatosamine	.... 6, 310
„ Ammonia	.... 2, 490	„ Ethyl	8, 471; 13, 456
„ Amyl	.... 11, 64	„ Ethylamine	.... 9, 60
„ Amylstrychnine	.... 17, 515	„ Ethylene-stannethyl	9, 101
„ Aniline	.... 11, 259	„ Ethyl-mercuric	.... 8, 477
„ Anthranilic acid	.... 12, 328	„ Ethyl-nicotine	.... 14, 237
„ Antimonic oxide	.... 4, 371	„ of Ethyl-quinine	.... 17, 309
„ Arsentiethyl	.... 9, 76	„ Ethylstannethyl	.... 9, 106
„ Asparagine	.... 10, 246	„ Ethylstrychnine	.... 17, 512
„ Aspartic acid	.... 10, 233	„ Ferric oxide	.... 5, 258
„ Atropine	.... 16, 454	„ Ferrous oxide	.... 5, 257
„ Auric oxide	.... 6, 222	„ Fucusine	.... 10, 382
„ Baryta	.... 3, 163	„ Furfurine	.... 10, 380
„ „ electrolysis of	1, 462	„ Glucina	.... 3, 300
„ „ with Phosphate of		„ Glycocol	.... 9, 253
„ „ Baryta	.... 3, 166	„ Guanine	.... 10, 482
„ „ and Potash	.... 3, 164	„ Harmaline	.... 16, 118
„ Benzidine	.... 11, 340	„ Harmine	.... 16, 106
„ Berberine	.... 17, 192	„ Hydrargethyl	9, 109; 10, 532
„ Biamidobenzoic acid	12, 150	„ Hydroberberine	.... 17, 256
„ Bichlorocinchonine	17, 238	„ Hydrocyanharmaline	16, 122
„ Bichloroharmine	.... 16, 109	„ Iridious oxide	.... 6, 381
„ Bisethyl	.... 9, 90	„ Lanthanic oxide	.... 3, 279
„ Bismethyl	.... 9, 89	„ Lead-oxide	.... 5, 156
„ Bismuth-oxide	.... 4, 440	„ Lead-oxide, aqueous, electrolysis of	.... 1, 463
„ Brucine	.... 17, 581	„ Lead-oxide, with fluoride of lead	.... 5, 158
„ Butyl	.... 10, 106	„ Lepidine	.... 14, 104
„ Cadmic oxide	.... 5, 61	„ Lime	.... 3, 214
„ Caffeine	.... 13, 232	„ Lime, alcoholate of	8, 267
„ Capryl	.... 13, 198	„ Lime, compound of, with urea	.... 7, 373
„ Caprylamine	.... 13, 221	„ Lithia	.... 3, 131
„ Casein	.... 18, 314	„ Lophine	.... 12, 202
„ Ceric oxide	.... 3, 272	„ Magnesia	.... 3, 244
„ Cerous oxide	.... 3, 271	„ Magnesia, alcoholate of	.... 8, 268
„ Chelidonine	.... 17, 166	„ Magnesia and Ammonia	.... 3, 248
„ Chloraniline	.... 11, 284	„ Magnesia, compound of urea with	.... 7, 373
„ Chinoline	.... 13, 249	„ Magnesia and Lime	3, 354
„ Chromic acid	.... 4, 140	„ Manganous oxide	.... 4, 231
„ Chromic oxide	.... 4, 140	„ Melaniline	.... 11, 354
„ Cinchonidine	17, 225, 228, 613	„ Menaphthylamine	.... 14, 126
„ Cinchonine	.... 17, 210	„ Mercurialine	.... 18, 201
„ Cinnamic Aldehyde	13, 262	„ Mercuric	.... 6, 74
„ Cobalt-oxide	.... 5, 338	„ Mercuric, compounds of bases with mercuric amide	.... 6, 94
„ Cobalt-oxide and Ammonia	.... 5, 342	„ Mercuric, with cyanide of mercury	.... 8, 17
„ Cocaine	.... 16, 302		
„ Codeine	.... 17, 33		
„ Conine	.... 13, 165		
„ Corydaline	.... 17, 609		
„ Creatine	.... 10, 254		
„ Cumidine	.... 13, 350		



Nitrate of Mercuric oxide with mercuric Iodide ....	6, 76	Nitrate of Potash with Bichromate of Potash ....	4, 151
„ Mercuric oxide with iodide of Silver ....	6, 199	„ Potash, preparation of Oxygen by ignition of ....	2, 22
„ Mercuric oxide with phosphide of Mercury ....	6, 76	„ Potash with Sulphotungstate of Potash	6, 40
„ Mercuric oxide with sulphide of Mercury	6, 76	„ Quinidine ....	17, 300
„ Mercuric oxide, compound of Urea with	7, 374	„ Quinine ....	17, 283
„ Mercuroso - mercuric oxide ....	6, 73	„ Quinine and Silver....	17, 285
„ Mercurous methyl ....	13, 399	„ Rhodic oxide ....	6, 364
„ Mercurous oxide ....	6, 69	„ Rhodic oxide and Soda ....	6, 367
„ Mercurous oxide and Ammonia ....	6, 91	„ Selenethyl ....	8, 357
„ Mercurous oxide and Guanine ....	10, 483	„ Serine ....	18, 369
„ Mercurous oxide, with phosphide of Mercury ....	6, 75	„ Sesquioxide of Osmium and Ammonia ....	6, 416
„ Methylanime ....	7, 317	„ Silica ....	3, 368
„ Methyl ....	7, 308	„ Silver-oxide ....	6, 168
„ Methylplumbethyl....	9, 108	„ Silver-oxide, decomposition of urea by	7, 369
„ Methylstannethyl ...	9, 104	„ Silver-oxide, electrolysis of ....	1, 464
„ Methyl-strychnine ....	17, 509	„ Silver-oxide with Alkarsin ....	9, 325
„ Molybdic acid ....	4, 66	„ Silver-oxide and Allyl	9, 364
„ Molybdic oxide ....	4, 66	„ Silver-oxide with Cyanide of Mercury ....	8, 33
„ Molybdous oxide ....	4, 66	„ Silver-oxide and Guanine ....	10, 483
„ Morphine ....	16, 432	„ Silver-oxide and Mercuric oxide ....	6, 199
„ Naphthylamine ....	14, 100	„ Silver-oxide with Lophine ....	12, 203
„ Narceine ....	17, 600	„ Silver-oxide with Melaniline ....	11, 354
„ Nicotine ....	14, 227	„ Silver-oxide with Nicotine ....	14, 229
„ Nickel-oxide ....	5, 379	„ Silver-oxide and Potash ....	6, 179
„ Nitranisidine ....	12, 267	„ Silver-oxide with Quinidine ....	17, 300
„ Nitroharmaline and Silver ....	16, 125	„ Silver-oxide and Theobromine ....	12, 473
„ Nitroharmine ....	16, 111	„ Silver-oxide with Urea	7, 374
„ Nitropapaverine ....	17, 261	„ Sinapine ....	14, 526
„ Nitrotyrosine ....	13, 363	„ Soda ....	3, 117
„ Osmious oxide ....	6, 415	„ „ compound of, with urea ....	7, 372
„ Oxyacanthine ....	17, 199	„ „ and Potash ....	3, 120
„ Palladious oxide ....	6, 350	„ Solanidine ....	18, 87
„ Palladious oxide and Ammonia ....	6, 353	„ Stannethyl....	9, 99
„ Papaverine ....	17, 260	„ Stannic oxide ....	5, 92
„ Peroxide of Silver....	6, 172	„ „ and Ammonia ....	5, 95
„ Phloramine ....	15, 70	„ Stannous oxide ....	5, 92
„ Phthalidine ....	13, 34	„ Stibethyl ....	9, 84; 10, 527
„ Picoline ....	11, 268	„ Stibmethylum ....	7, 327
„ Piperidine ....	10, 449		
„ Platinamine	6, 311, 315		
„ Platinic oxide and Soda	6, 329		
„ Potash ....	6, 323		
„ Platinic oxide ....	6, 296		
„ Platinous oxide ....	6, 296		
„ Platosamine ....	6, 311		
„ Potash ....	3, 68		

Nitrate of Strontia	...	...	3, 179	the combination			
"	"	emission of		of, with water	....	1, 295	
"	"	light in the crystal-		Nitric acid, impurities in	....	2, 392	
"	"	lisation of...	1, 208	"	oxidation of organic		
"	"	Strychnine....	17, 494	"	compounds by	....	7, 123
"	"	Strychnine-bromethyl-		"	passive state of iron		
"	"	ammonium	17, 513	"	immersed in	....	1, 355
"	"	Tellurethyl....	8, 387	"	presence of, in the		
"	"	Telluric oxide	4, 413	"	air	....	2, 411
"	"	Telluromethyl	10, 494	"	presence of, in com-		
"	"	Theobromine	12, 472	"	mon sulphuric		
"	"	Thialdine	9, 314	"	acid	....	2, 181
"	"	Thorina	3, 335	"	properties of	....	2, 393
"	"	" and Potash	3, 336	"	tests for	....	2, 401
"	"	Titanic oxide	3, 483	"	use of, in the manu-		
"	"	Tungstic acid	4, 37	"	facture of chlorine		2, 291
"	"	Uranic oxide	4, 182	Nitric Ether	....	8, 475	
"	"	Urea	7, 370	Nitric Oxide	....	2, 377	
"	"	Vanadic acid	4, 96	"	absorption of, by		
"	"	" oxide	4, 96	"	alcohol	....	8, 265
"	"	Yttria	3, 290	"	and ammonia, sul-		
"	"	Zinc	5, 33	"	phite of	....	2, 492
"	"	Zirconia	3, 346	"	compound of, with		
Nitratoxygen	....	....	2, 16	"	bichloride of pla-		
Nitrazobenzene	....	....	11, 343	"	tinum ?....	....	6, 295
Nitrazophenylamine	....	....	11, 293	"	compound of, with		
Nitrazoxybenzene	....	....	11, 343	"	hæmoglobin	....	18, 393
Nitre	....	....	3, 68	"	compounds of, with		
"	cubic	....	3, 117	"	acids	....	2, 379
"	with Sulphomolybdate of			"	evolution of, from		
"	Potassium	....	4, 73	"	vegetable sub-		
"	use of, for preserving			"	stances (leaves,		
"	meat	....	7, 117	"	roots, &c.), during		
Nitric acid	....	....	2, 386	"	eremacausis	....	7, 93
"	action of fuming,			"	with fluoride of		
"	on volatile oils	....	7, 165	"	silicium	....	3, 368
"	action of, on organic			"	gas, use of, for pre-		
"	compounds	....	7, 122	"	serving meat	....	7, 116
"	anhydrous	....	2, 389	"	and potash, sul-		
"	" amount of,			"	phite of	....	3, 70
"	in aqueous nitric			"	presence of, in com-		
"	acid	....	2, 395	"	mon sulphuric		
"	aqueous, preparation			"	acid	....	2, 181
"	of	....	2, 390	"	and soda, sulphite		
"	concentration of	....	2, 393	"	of	....	3, 118
"	copulated acids pro-			"	with stannic chlor-		
"	duced by, with			"	ide	....	5, 93
"	glycocoll and leu-			"	sulphate of	....	2, 445
"	cine	....	7, 226	"	" combined		
"	decomposition of,			"	with hydrated		
"	by light	....	1, 172	"	sulphuric acid	....	2, 447
"	decompositions of	....	2, 395	"	sulphite of	....	2, 441
"	electrolysis of	....	1, 452	"	with tartaric acid	10, 272	
"	formation of, in the			Nitride of Anisyl, Phenyl, and			
"	eremacausis of ni-			"	Hydrogen	....	13, 145
"	trogenous organic			"	Benzoyl, phenyl and		
"	bodies	....	7, 92	"	benzoyl	....	12, 156
"	fuming	....	2, 402	"	Benzoyl, salicyl and		
"	heat developed in			"	Hydrogen	....	12, 324

Nitride of	Binitrobenzoyl and		Nitrite of	Palladious oxide and	
	Hydrogen ....	12, 153		Soda ....	6, 355
"	Cadmium ? ....	5, 61	"	Potash ....	3, 67
"	Chlorobenzoyl and		"	Silver-oxide and	
	Hydrogen ....	12, 152		Baryta ....	6, 181
"	Chromium....	4, 139	"	Silver-oxide and Soda	6, 181
"	Copper ....	5, 444	"	Soda ....	3, 116
"	Gold ? ....	6, 222	"	Strontia ....	3, 179
"	Iron ....	5, 257	Nitrites ....		2, 381
"	Mercury ....	6, 66	"	action of, on arterial	
"	" with hy-			blood ....	18, 393
	drated bromate of		Nitro-acids ....		7, 197
	mercuric oxide ....	6, 83	Nitro-arsenate of mercurous		
"	Nickel ? ....	5, 379	oxide ....		6, 119
"	Nitrobenzoyl and		Nitro-aspartate of lead		10, 237
	Hydrogen ....	12, 152	Nitrobenzaldide ....		12, 119
"	Phenyl, Benzoyl, and		"	compound of,	
	Hydrogen ....	12, 155		with bisulphite	
"	Phenyl and Citra-			of ammonia ...	12, 121
	conyl ....	11, 321	"	compound of,	
"	Phenyl and Malyl....	11, 319		with bisulphite	
"	Phenyl and Pyrotar-			of soda ....	12, 121
	tryl ....	11, 326	"	hydride of ....	12, 119
"	Pieramyi ....	12, 191	Nitrobenzamide ....		12, 152
"	Potassium ....	3, 66	Nitrobenzanisidide ....		12, 269
"	Silicium and Potas-		Nitrobenzene ....		11, 201
	sium ....	3, 375	"	preparation of ani-	
"	Sulphobenzoyl and			line from ....	11, 240
	Hydrogen ....	12, 150	"	reduction of, to	
"	Sulphophenyl, Ben-			aniline ....	11, 202
	zoyl, and Acetyl....	12, 159	Nitrobenzoate of Ammonia		12, 123
"	Sulphophenyl, Ben-		"	Baryta ....	12, 124
	zoyl, and Hydrogen	12, 157	"	Bibromocarbolic	
"	Sulphophenyl and			acid ....	12, 132
	Bibenzoyl ....	12, 159	"	Bibromophenyl	12, 132
"	Zinc ....	5, 33	"	Binitrocarbolic	
Nitrides ....		7, 23		acid ....	12, 133
" metallic ....		2, 494	"	Binitrophenyl	12, 133
Nitrindin ....		13, 88	"	Copper ....	12, 127
Nitrite of Ammonia		2, 489	"	Ethyl ....	12, 128
"	" preparation		"	Iron ....	12, 126
	of nitrogen from ....	2, 372	"	Lead....	12, 126
"	Amyl ....	11, 63	"	Lime....	12, 125
"	Baryta ....	3, 162	"	Manganese ....	12, 125
"	Cupric oxide ....	5, 446	"	Methyl ....	12, 127
"	Ethyl ....	8, 468	"	Potash ....	12, 124
"	<i>hydraté d' Anthra-</i>		"	Silver ....	12, 127
	<i>cénose</i> ....	16, 167	"	Soda ....	12, 124
"	of Lead-oxide ....	5, 152	"	Zinc ....	12, 125
"	Lime ....	3, 213	"	Strontia ....	12, 125
"	Magnesia ....	3, 243	Nitrobenzoic acid ....		12, 122
"	Manganous oxide ....	4, 231	"	anhydrous ....	12, 137
"	Mercurous oxide ....	6, 69	Nitrobenzol, <i>see</i> Nitrobenzene.		
"	" decompo-		Nitrobenzoyl, chloride of		12, 137
	sition of urea by ....	7, 367	"	and hydrogen,	
"	Methyl ....	9, 505		nitride of ....	12, 152
"	Methyl-strychnine	17, 509	"	-benzoin ....	12, 177
"	Palladious oxide and		Nitrobenzylene, sulphide		12, 134
	Potash ....	6, 355	Nitrobichlorocarbolic acid		11, 210



Nitrobichlorophenol ....	11, 210	Nitrogen Cyanide? ....	8, 147
Nitrobronaphthise, <i>see</i> Bromonitronaphthalin.		„ detection of, in organic compounds by heating with potassium ....	7, 146
Nitrocacodylate of Silver ....	9, 332	„ elimination of, in fermentation and putrefaction ....	7, 97
Nitrocapric Acid ....	14, 500	„ estimation of, in organic compounds ....	7, 86
Nitrocapyrylate of Ethyl ....	13, 218	„ gas, absorption of, by alcohol....	8, 265
Nitrocapyrylene ....	13, 217	„ history of ....	2, 370
Nitrocapyrylic acid ....	13, 217	„ Iodide ....	2, 465
Nitrocarbolic acid ....	11, 203	„ memoirs relating to ....	2, 368
Nitrochloride of Mercury ....	6, 89	„ in organic compounds ....	7, 5
Nitrochloroniceic acid ....	11, 204	„ Oxides ....	2, 373—402
„ ether ....	11, 204	„ Peroxide, <i>see</i> Hypo-nitric acid.	
Nitrochloronicene ....	14, 172	„ Phosphide ....	2, 436
Nitrochloromichmyl ....	12, 116	„ preparation of ....	2, 372
Nitrocholic acid? ....	9, 503	„ proportion of, in atmospheric air ....	2, 407
Nitrocinnamate of Ethyl ....	13, 301	„ Protoxide ....	2, 373
Nitrocinnamene ....	13, 18	„ Sulphide ....	2, 442
Nitrocinnamic acid ....	13, 300	„ solution of, in water ....	2, 373
„ anhydride ....	13, 302	„ sources of ....	2, 371
Nitrococussates ....	13, 26	„ substitution of, for hyponitric acid ....	7, 75
Nitrococussic acid ....	13, 25	„ substitution of, for oxygen ....	7, 75
Nitrocodeine ....	17, 40	„ various forms in which it enters into organic compounds ....	7, 144
Nitrocumarin ....	13, 334	„ and Copper, boride of? ....	5, 448
Nitrocumidine ....	13, 352	„ and Zinc, boride of? ....	5, 36
Nitrocuminic acid ....	14, 170	Nitroglycerin 9, 501; 10, 562; 13, 583	
Nitrocumol ....	13, 317	Nitroharmidine, <i>see</i> Nitroharmine.	
Nitrocyanide of Silver....	8, 29	Nitroharmalidine, <i>see</i> Nitroharmine.	
„ Titanium	3, 488; 7, 418	Nitroharmaline ....	16, 122
Nitrocymene ....	14, 216	Nitroharmine ....	16, 109
Nitro-derivatives of Cellulose ....	15, 166	„ Biniodide ....	16, 112
Nitrodacyl ....	12, 300	Nitrohelenin ....	17, 524
Nitrodacylic acid ....	13, 23	Nitrohippurates ....	12, 130
Nitrodulcite ....	15, 388, 389	Nitrohippuric acid ....	12, 129
Nitro-erythroglucin ....	12, 387	Nitrohydurilic acid ....	10, 159
Nitro-oxanthic acid ....	17, 537	Nitro-insosite ....	15, 354
Nitroform ....	12, 493	Nitro-iodide, mercuric....	6, 81
Nitrofrangulates ....	16, 79	Nitro-isodulcite ....	16, 535
Nitrogen ....	2, 370	Nitroleucic acid ....	11, 431
„ absorption of, by non-azotised organic bodies during eremacausis ....	7, 92	Nitrolin ....	15, 157; 17, 474
„ ammonio-sulphide of, with ammonio-chloride of sulphur ....	2, 493	Nitrolophine ....	12, 205
„ atomic weight of ....	2, 373	Nitromannite ....	15, 380
„ behaviour of, in eremacausis ....	7, 92	Nitromaric acid ....	17, 325
„ behaviour of organic compounds containing, towards fixed alkalis ....	7, 138	Nitromeconin ....	14, 443
„ Binoxide ....	2, 377	Nitromesidine ....	9, 21; 13, 353
„ Bromide ....	2, 469		
„ Chloride ....	2, 470		
„ Chlorophosphide ....	2, 470		
„ Chlorosulphide ....	2, 475		

Nitromesitylene	....	9, 20	Nitrosalicylate of Silver	....	12, 311
Nitromesitylol	....	13, 347	„ Soda....	....	12, 309
Nitrometastyrol	....	13, 19	Nitrosalicylites	....	12, 305
Nitromuriatic acid	....	2, 476	Nitrosalicylic acid	....	12, 305
Nitronaphtalase, <i>see</i> Nitronaphthalin.			„ hydrated	....	12, 308
Nitronaphtalèse, <i>see</i> Binitronaphtalin.			Nitrosalicylous acid	....	12, 304
Nitronaphtalise, <i>see</i> Ternitronaphtalin.			Nitrosaniline	....	11, 287
Nitronaphtaleïse (Laurent's)	14, 91		Nitrosonaphthylin	....	14, 105
Nitronaphtalin	....	14, 82	Nitrosopelargonic acid	....	13, 371
Nitro-nuclei	....	7, 170	Nitrosophenylene	....	11, 287
„ aldehydes of	....	7, 195	Nitrostilbic acid	....	12, 173
Nitroxylol	....	13, 137	Nitrostyrol	....	13, 18
Nitropapaverine	....	17, 260	Nitrosulphobenzene	....	11, 346
Nitroparanicene	....	14, 169	Nitrosulphonaphthalates	....	14, 85
Nitropeucedamide	....	12, 100	Nitrosulphoxyloic acid	....	13, 137
Nitropeucedanin	....	12, 100	Nitrosulphuric acid	....	2, 444
Nitrophenetidine	....	12, 272	Nitrotartaric acid	....	10, 345
Nitrophenol	....	11, 203	Nitrotheine	....	10, 453
Nitrophenyl-pyrotartrime	....	11, 327	Nitrothionessal....	....	12, 189
Nitrophloroglucin	....	15, 68	Nitrotoluene, or Nitrotoluol	....	12, 300
Nitrophthalates	....	13, 28	Nitrotoluide	....	12, 300
Nitrophthalic acid	....	13, 27	Nitrotoluylate of Ethyl	....	13, 25
Nitrophthalimide	....	13, 33	„ Methyl	....	13, 24
Nitrophthalin	....	13, 19	Nitrotoluylates, metallic	....	13, 22
Nitropianyl	....	14, 443	Nitrotoluylic acid	....	13, 22
Nitropicril	....	12, 188	Nitrotyrosine	....	13, 363
Nitropropionates	....	9, 431	Nitrous Acid	....	2, 380
Nitropropionic acid	....	9, 430	„ action of, on urea	7, 367	
Nitroprussic acid	....	8, 129	„ formation of elaidic		
Nitroprusside of Ammonium	....	8, 130	from oleic acid,		
„ Barium	....	8, 132	by the action of	17, 76	
„ Calcium	....	8, 133	„ presence of, in		
„ Copper	....	8, 134	common sul-		
„ Iron	....	8, 133	phuric acid	....	2, 181
„ Potassium	....	8, 130	Nitrous Air or Gas	....	2, 377
„ Silver	....	8, 134	„ Ether	....	8, 468
„ Sodium	....	8, 130	„ Gas, ethereal	....	8, 217
„ „ reaction			„ Oxide	....	2, 373
of, with strychnine	....	17, 502	„ absorption of, by		
„ Zinc	....	8, 133	alcohol	....	8, 265
Nitroprussides, formation of	....	8, 125	„ absorption of, by		
„ decomposition of,			liquid volatile		
by boiling with			oils	....	7, 167
alkalis	....	13, 413	„ maximum tension		
Nitrosaccharates	....	9, 255	of, at different		
Nitrosaccharose	....	15, 295	temperatures	1, 261; 2, 503	
Nitrosalicylamic acid	....	12, 333	Nitroveratric acid	....	13, 356
Nitrosalicylamide	....	12, 333	Nitroxybenzoic acid	....	12, 313
Nitrosalicylate of Ammonia	....	12, 308	Nitroxylodin	....	15, 110
„ Baryta	....	12, 309	<i>Nitrum</i> ....	....	2, 68
„ Copper	....	12, 310	„ <i>fixum</i>	....	3, 20
„ Iron	....	12, 310	„ <i>flammans</i>	....	2, 490
„ Lead	....	12, 309	„ <i>seri lactis</i>	....	15, 217
„ Mercurous	....	12, 310	Nitryl (NO <sup>4</sup> ), substitution of, for		
„ of Potash	....	12, 308	hydrogen	....	7, 122
			Nobili's rings	....	1, 464
			Noble Millefoil, oil of	....	14, 384
			Nomenclature, crystallographic	1, 17	

Nomenclature of oxides and oxygen acids	2, 38—40	Nuclei, compounds of, with sulphur....	7, 211
„ suggestions for a new chemical, particularly for organic compounds	7, 149	„ compounds of, with 2 atoms of hydrogen and 1 atom of oxygen	7, 191
Non-conductors, electric	1, 312	„ compounds of, with 2 atoms of oxygen	7, 192
Non-metallic models for electrotyping	1, 508	„ derivative or secondary	7, 169
Non-rotatory-camphor	14, 350	„ primary	7, 153
Nontronite	5, 282	„ „ aldehydes of	7, 193
Nonylene	13, 367	Nucleus, combinations of a primary or secondary, with substances externally attached to it	7, 170
Norium	3, 349	„ theory	7, 14
Nose, mucus of	18, 349	„ „ Laurent's	7, 18
Noseane	3, 456	Nussierite	5, 164
Nucin	17, 20	Nutgalls, preparation of ellagic acid from	16, 184
Nuclei, compounds of, with hydrogen and oxygen in equal numbers of atoms	7, 189	„ preparation of gallic acid from	12, 398
„ compounds of, with 4, 6, and 8 atoms of oxygen	7, 196	Nutmeg-butter	16, 395
„ compounds of, with 1 atom of hydrogen	7, 170	„ -camphor	16, 389
„ compounds of, with 2 atoms of hydrogen	7, 174	„ -oil	14, 389
„ compounds of, with iodine, bromine, chlorine, and fluorine	7, 212	<i>Nux vomica</i> , preparation of brucine from	17, 573
		„ preparation of strychnine from	18, 480

## O.

Oat-legumin	18, 437	Octylene	13, 180
Ochre	5, 282	„ Chloride	13, 588
„ uranic	4, 159	Octylic Alcohol	13, 183
Octobasic Arseniate of Cupric Oxide?	5, 471	Odmyl	10, 97
„ Carbonate of Zinc-oxide	5, 14	Odorine, preparation of	11, 265, 266
„ Cupric Sulphophosphate	5, 432	Odours of organic compounds	7, 66
„ Nitrate of Zinc-oxide	5, 34	œnanthates	12, 466
„ Sulphate of Cupric oxide	5, 425	<i>œnanthe crocata</i> , resin of	17, 450
„ Sulphate of Zinc-oxide	5, 22	„ <i>fistulosa</i> , resin of	17, 450
Octodeca-sulphide of Arsenic	4, 279	œnanthic acid	12, 454
Octohedral Borax	3, 88	„ acid, anhydrous (so called)	12, 459
Octohydrated Alloxan	10, 178	„ ether	12, 457
Octosilicate of Alumina	3, 419	œnantho-cuminic Anhydride	14, 159
„ Potash	3, 372	œnanthol	12, 446
Octyl	13, 182	„ with ammonia	12, 449
„ Chloride	13, 587	„ with alkaline bisulphites	12, 449
„ Hydrate	13, 183	„ Hydrate of	12, 447
Octylamine	13, 219	œnanthyl Chloride	12, 470
Octylate of Amyl	13, 202	„ Hydride	12, 446
„ Ethyl	13, 199	„ Hydride of (so called)	12, 450
„ Methyl	13, 198	œnanthylamide	12, 471
		œnanthylate of Ammonia	12, 453
		„ Baryta	12, 453



- Cœnanthylate, Benzoic .... 12, 462  
     " of Copper .... 12, 453  
     " Cumyl.... .... 14, 159  
     " Ethyl .... 12, 454  
     " Lead .... 12, 453  
     " Phenyl .... 12, 454  
     " Potash .... 12, 453  
     " Silver .... 12, 453  
 Cœnanthylene .... 12, 445  
     " Chloride .... 12, 461  
 Cœnanthylic acid .... 12, 451  
     " Aldehyde .... 12, 446  
     " Benzoate .... 12, 462  
 Oenolic acid, *see* Cœnolin.  
 Oenolin .... 14, 478  
*Oenothera biennis*, emission of  
   light by the flowers of .... 1, 187  
 Oenylamine .... 9, 411  
 Oerstedtite .... 3, 464  
 Ohm's formulæ relating to the  
   quantity and resistance of the  
   electric current .... 1, 414  
 Oil of Amber .... 14, 323  
     " Ants, artificial .... 10, 370  
     " Ants, fatty .... 17, 93  
     " Ants, volatile .... 14, 358  
     " Caoutchouc .... 17, 347  
 Oil, chlorinated, of Cinnamic acid 13, 297  
     " Chlorocyanic .... 9, 466  
 Oil of Olefiant Gas .... 14, 390  
     " Vitriol, action of, on alco-  
       hol .... 8, 222  
     " Vitriol, brown .... 2, 180  
     " Vitriol, common, or Eng-  
       lish .... 2, 180  
     " Vitriol, preparation of 2, 180, 431  
     " Vitriol, purification of,  
       from oxides of nitrogen 2, 182  
     " Vitriol, rectified, distilled  
       or purified .... 2, 183  
     " Vitriol, selenium in .... 2, 244  
     " Wine .... 13, 175, 420  
 Oils, adulterations of expensive,  
   with oil of turpentine .... 8, 162  
     " Brominated .... 16, 316  
     " Chlorinated .... 16, 316  
 Oils, drying .... 16, 308  
   Oil of Cress-seed .... 16, 315  
     " Deadly Nightshade seed 16, 314  
     " Gold-of-Pleasure seed.... 16, 315  
     " Gourd seed .... 16, 315  
     " Hemp.... .... 16, 312  
     " Henbane seed.... 16, 314  
     " *Hesperis matronalis* .... 16, 315  
     " Linseed .... 16, 309  
     " *Madia sativa*.... 16, 315  
     " Poppy.... .... 16, 312  
     " Scotch-fir seed .... 16, 315  
     " Silver Fir cones .... 16, 316  
 Oils, drying (*continued*):  
   Oil of Spruce Fir .... 16, 316  
     " Sunflower .... 16, 315  
     " Tobacco-seed .... 16, 314  
     " Walnut .... 16, 313  
     " Woad-seed .... 16, 315  
 Oils, fatty, occurring in Nature:—  
   Oil of Almonds .... 17, 92  
     " Anacardium .... 17, 93  
     " Ants .... 17, 93  
     " *Argemone mexicana* .... 17, 93  
     " *Aspidium filix mas* .... 17, 93  
     " *Azadirachta indica* .... 17, 94  
     " Barley-meal .... 17, 94  
     " Beech-nuts .... 17, 94  
     " Black mustard .... 17, 553  
     " Brazil-nuts .... 16, 398  
     " *Butea frondosa* .... 17, 94  
     " *Calophyllum inophyllum* 17, 94  
     " *Canarium commune* .... 17, 94  
     " Carapa .... 16, 388  
     " *Cassuvium pomiferum* 17, 94  
     " Chinese Radish .... 17, 555  
     " Cocoa-nut .... 17, 389  
     " Cod-liver .... 16, 323  
     " Colza .... 17, 554  
     " Cotton-seed .... 17, 94  
     " *Croton Tiglium* .... 17, 95  
     " *Daphne Mezereum* .... 17, 95  
     " Dolphin .... 16, 323  
     " Earth-almond.... 17, 395  
     " Earth-nut .... 16, 317  
     " Eggs .... 17, 96  
     " Ergot of Rye .... 17, 96  
     " *Euphorbia Lathyris* .... 17, 96  
     " Hazel-nuts .... 17, 97  
     " Horse-chestnuts .... 17, 97  
     " *Jatropha Curcas* .... 17, 140  
     " *Jatropha glauca* and  
       *Jatropha glandulifera* 17, 141  
     " *Mesua ferrea* (fruit) .... 17, 97  
     " Morels .... 17, 97  
     " Moringa seed .... 16, 386  
     " *Nigella sativa* .... 17, 97  
     " Olive .... 17, 91  
     " Palm .... 16, 397  
     " *Paris quadrifolia* .... 17, 97  
     " Parsley .... 17, 97  
     " Peas (phosphoretted) .... 16, 487  
     " Pilchard .... 16, 322  
     " Plum-kernels .... 17, 98  
     " *Pengamia glabra* .... 17, 98  
     " Porpoise .... 16, 322  
     " Ray-liver .... 16, 324  
     " *Ricinus communis* .... 17, 137  
     " Sea-calf .... 16, 322  
     " Seal .... 16, 315  
     " Sesame .... 17, 98  
     " Shark .... 16, 322

Oils, fatty (*continued*):

Oil of Silkworms	....	....	17, 98
„ Sperm....	....	....	16, 321
„ Spindle-tree	....	....	17, 98
„ <i>Sterculia fetida</i>	....	....	17, 99
„ Summer rape	....	....	17, 554
„ <i>Thea</i> and <i>Camelia</i> (various species)	....	....	17, 99
„ Truffles	....	....	17, 99
„ Turnip	....	....	17, 554
„ Turnip-stemmed cabbage	....	....	17, 554
„ Whale	....	....	16, 321
„ White mustard	....	....	17, 553
„ Winter rape	....	....	17, 554
Oils, fatty, preparation of Olein from	....	....	17, 84
„ solidification of, by the action of hyponitric acid	....	....	17, 75
„ fixed, adulteration of vola- tile oils proper, with	....	....	7, 161
„ fixed, rancid putrefaction of in contact with protein- compounds	....	....	7, 98
„ fixed, spontaneous combus- tion of	....	....	7, 242
„ of various species of Jatro- pha	....	....	17, 140
„ isomeric, with oil of Tur- pentine	....	....	14, 271
„ natural, isomeric with oil of turpentine	....	....	14, 281
„ volatile, absorption of chlo- rine and bromine by	....	....	7, 165
„ volatile, absorption of oxy- gen by	....	....	7, 164
„ volatile, action of iodine on	....	....	7, 165
„ volatile, action of nitric acid on	....	....	7, 165
„ volatile, adulteration of	....	....	7, 161
„ volatile, artificial formation of	....	....	7, 158
„ volatile, combination of	....	....	7, 164
„ volatile, decoloration of, in sunshine	....	....	7, 96
„ volatile, decompositions or reactions of	....	....	7, 163
„ volatile, containing eugenic acid	....	....	14, 209
„ volatile, extraction of, from plants and animals	....	....	7, 159
„ volatile, history of	....	....	7, 157
„ volatile, liquid, absorption of gases by	....	....	7, 167
„ volatile, literature of	....	....	7, 156
„ volatile, mixture of, with bisulphide of carbon	....	....	7, 168
„ volatile, mixtures of, with fats	....	....	7, 169

## Oils, volatile, mixture of, with

Hydrocyanic acid	....	7, 163
„ volatile, mixture of, with Organic acids	....	7, 163
„ volatile, odour of	....	7, 163
„ volatile, occurring in Plants:		
Oil of Acacia	....	14, 356
„ Angelica	....	14, 357
„ Angustura	....	14, 357
„ Animé	....	14, 358
„ Anise....	....	14, 195
„ <i>Aristolochia clematidis</i>	....	14, 532
„ Arnica	....	14, 358
„ Asafoetida	....	17, 399
„ Asarum	....	14, 359
„ Balm....	....	14, 359
„ Bay	....	14, 360
„ Beans	....	14, 361
„ Behen	....	16, 586
„ Bergamot	....	14, 281
„ Birch, empyreumatic	....	14, 324
„ Birch-leaves	....	14, 361
„ Bitter Almonds	....	12, 19
„ Bitter Almonds, cam- phor or stearoptene of	....	12, 173
„ Bitter Almonds, combi- nation of Chloride of Benzoyl with	....	12, 111
„ Botany Bay resin	....	14, 362
„ Brazilian clove cinnamon	....	14, 210
„ C <sup>12</sup> H <sup>8</sup> , obtained by dry distillation of fats and resins	....	11, 378
„ C <sup>12</sup> H <sup>10</sup> , obtained in the distillation of resin-oil	....	11, 395
„ of Cajeput	....	14, 334, 510
„ from oil of Cajeput	....	16, 151
„ of Canella alba	....	14, 210
„ Cardamom	....	14, 362
„ Carrot	....	14, 362
„ Cascarilla	....	14, 363
„ Cassia	....	13, 258
„ Cassia, stearoptene of	....	17, 395
„ Castoreum	....	14, 364
„ Celery	....	14, 364
„ <i>Chenopodium ambro- sioides</i>	....	14, 366
„ China Orange	....	14, 306
„ Cinnamon	....	13, 258
„ Cinnamon, Iodine, and Iodide of Potassium, compound of	....	13, 267
„ Cinnamon, resins from	....	13, 264
„ <i>Citrus Lumia</i>	....	14, 509
„ Cinnamon-leaves from Ceylon	....	14, 210
„ Cloves	....	14, 209
„ Cloves, indifferent	....	14, 285
„ Cocoa-nut	....	16, 389

Oils, volatile (*continued*) :

Oil of Coffee	....	14, 366
„ <i>Convolvulus Scoparius</i>	14, 363	
„ Copaiba	....	14, 286
„ Coriander	....	14, 336
„ Cress....	....	10, 56
„ Cubebs	....	16, 272
„ Cubebs, hydrated	....	16, 271
„ Culilawan	....	14, 364
„ Curcuma	....	14, 367
„ <i>Curcuma Zerumbet</i>	....	14, 367
„ Dahlia	....	14, 367
„ <i>Dryabalanops Camphora</i>	14, 355	
„ East Indian grass	....	14, 368
„ Elder flower	....	14, 368
„ Elemi....	....	14, 289
„ from the root of <i>Erysi-</i> <i>mum Alliaria</i>	....	10, 55
„ of Fennel	....	14, 196
„ Fine-leaved Water-drop	14, 404	
„ Feverfew	....	14, 369
„ Galanga	....	14, 369
„ Galbanum	....	17, 238
„ Galbanum, blue	....	17, 240
„ Gale	....	14, 369
„ Garlic....	....	9, 372
„ <i>Geum urbanum</i>	....	14, 370
„ Ginger	....	14, 370
„ Gomart	....	14, 291
„ Guiana Laurel	....	14, 296
„ Hedwigia	....	14, 371
„ Hemp	....	14, 371
„ Hops ...	....	14, 291
„ Horse-radish....	....	10, 54
„ Hyssop	....	14, 371
from the herb and seed of <i>Iberis amara</i>	....	10, 56
„ of Jonquil	....	14, 373
„ Juniper-berries	....	14, 292
„ Lançon balsam	....	14, 373
„ Laurel	....	12, 29
„ <i>Laurus Camphora</i>	....	14, 356
„ Lavender	....	14, 374
„ Lemon	....	14, 297
„ Lilac ....	....	14, 377
„ Lime...	....	14, 304
„ Lime-flower ...	....	14, 378
„ Liquid Storax	....	13, 1
„ Mace ....	....	14, 390
„ Mandarin	....	14, 304
„ Marjoram	....	14, 379
„ Massoy	....	14, 380
„ Masterwort	....	14, 381
„ Matico	....	14, 382
„ Mecca Balsam	....	14, 383
„ <i>Mentha viridis</i>	....	14, 383
„ <i>Mercurialis annua</i>	....	14, 383
„ Mignonette	....	14, 383
„ Millefoil	....	14, 384

Oils, volatile (*continued*) :

Oil of Mugwort	....	14, 385
„ Mustard	....	10, 41
„ Mustard and Oil of Gar- lic, mixtures of ....	....	10, 56
„ „ Oils related to	10, 54	
„ Myrrh	....	14, 413
„ Myrtle	....	14, 385
„ Nasturtium	....	14, 385
„ Neroli	....	14, 386
„ Neutral, of meadow-sweet	14, 382	
„ of Nigella	14, 388 ; 17, 97	
„ Noble Millefoil	....	14, 384
„ Nutmeg	....	14, 389
„ Olibanum	....	14, 390
„ Orange-flower	....	14, 386
„ Orange-peel	....	14, 305
„ Origanum	....	14, 391
„ Osmitopsis	....	14, 337
„ Para-copaiba	....	14, 288
„ <i>Parmelia parietina</i>	....	14, 391
„ Parsley	....	14, 307
„ Peach-leaf	....	12, 29
„ Pelargonium	....	14, 392
„ Pennyroyal	....	14, 352
„ Pepper	....	14, 307
„ Peru balsam	....	13, 283
„ <i>Peucedanum Oreoseli-</i>	14, 308	
„ Pimento	....	14, 210
„ Pimpinella	....	14, 392
„ Poplar-buds	....	14, 392
„ Portugal Laurel	....	12, 29
„ <i>Pulegium micranthum</i>	14, 352	
„ Radish	....	10, 56
„ Rose	....	14, 393
„ Rosemary	....	14, 395
„ Rue	....	14, 489
„ Sage	....	14, 398
„ Saffron	....	14, 397
„ Sassafras	....	14, 161
„ Savin....	....	14, 310
„ Scurvy-grass ...	....	10, 55
„ <i>Semen contra</i>	....	14, 316
„ Serpentarea	....	14, 400
„ Spiræa	....	12, 235
„ Spruce Fir	....	16, 316
„ Squill....	....	14, 400
„ Star-anise	....	14, 197
„ Sweet Sedge	....	14, 400
„ Syringa	....	14, 401
„ <i>Tagetes glandulosa</i>	....	14, 401
„ Tansy	....	14, 402
„ Tarragon	....	14, 197
„ Tartar	....	3, 22
„ Tea	....	14, 402
„ Templin	....	14, 242
„ Thuja	....	16, 246
„ from Thymol....	....	13, 346



Oils, volatile (*continued*):

Oil of Turpentine ....	14, 239	Oleate of Lime ....	17, 71
„ „ Bihydrochlorate of ....	14, 268	„ „ Magnesia ....	17, 72
„ „ decompositions of ....	14, 245	Oleates of Mercury ....	17, 73
„ „ English ....	14, 242	Oleate of Methyl ....	17, 82
„ „ French ....	14, 242	„ Nickel ....	17, 73
„ „ German ....	14, 242	„ Quinine ....	17, 294
„ „ properties of ....	14, 242	„ Potash ....	17, 69
„ „ sources of ....	14, 240	„ Silver ....	17, 73
„ „ Venetian ....	14, 242	„ Soda ....	17, 90
„ Valerian, crude ....	14, 314	„ Strontia ....	17, 71
„ „ valerene from ....	14, 313	„ Zinc ....	17, 72
„ Vitiveria ....	14, 403	Oleates, metallic ....	17, 69
„ Water Horehound ....	14, 404	Oleene ....	11, 401
„ Wild Chamomile ....	14, 365	Olefiant gas ....	8, 164
„ Wild Thyme ....	14, 403	„ oil of ....	8, 376
„ Winter green ....	12, 255	„ formation of, from alcohol ....	8, 237
„ Wormseed ....	14, 316 ; 15, 40	Oleic acid ....	17, 62
„ Wormwood ....	14, 350	„ conversion of, into elaidic acid ....	17, 76
Oils, volatile, properties of ....	7, 162	„ formation of caprylic acid from ....	13, 190
„ volatile, resinification of, by oxidation ....	7, 164	„ purification of coloured, from stearin works ....	17, 64
„ volatile, separation of ....	7, 160	„ preparation of olein from ....	17, 86
„ volatile, solubility of, in water ....	7, 166	„ preparation of palmitic acid from ....	16, 354
„ volatile, solution of, in acetone ....	7, 169	„ solubility of, in alcohol and ether ....	17, 73
„ volatile, solution of in alcohol ....	7, 168	Oleic and Margaric acids, melting points of mixtures of, according to Chevreul ....	17, 74
„ volatile, solution of metallic oxides in ....	7, 168	„ Margaric, and Stearic acids, Chevreul's method of preparing ....	16, 355
„ volatile, solution of organic bases in ....	7, 169	Olein, composition of ....	7, 237
„ volatile, solution of phosphorus by ....	7, 168	Oleins ....	17, 84
„ volatile, solutions of resins and resinous colouring matters in ....	7, 169	Oleophosphoric acid ....	16, 483
„ volatile, solution of sulphur in ....	7, 168	Oleosulphuric acid ....	17, 88
„ volatile, solution of, in wood-spirit ....	7, 169	<i>Oleum animale Dippelii</i> ....	18, 256
„ volatile, sources of ....	7, 157	„ „ <i>animale Dippelii</i> , alkaloids in ....	11, 263
Okenite, or Dysklasite ....	3, 389	„ „ <i>Anthos</i> ....	14, 395
Olanine, preparation of ....	11, 266	„ „ <i>baccarum Juniperi</i> ....	14, 293
„ properties of ....	11, 274	„ „ <i>Cajeputi</i> ....	14, 335
<i>Olea europæa</i> , oil from the pulp of ....	17, 90	„ „ <i>Cinæ</i> ....	14, 316
Oleamide ....	17, 101	„ „ <i>Cornu Cervi</i> ....	18, 256
Oleandrine ....	17, 596	„ „ <i>Jecoris Aselli</i> ....	16, 323
Oleate of Ammonia ....	17, 69	„ „ <i>Petroselinii</i> ....	14, 307
„ Baryta ....	17, 71, 109	„ „ <i>Piperis</i> ....	14, 307
„ Chromium ....	17, 72	„ „ <i>Sabinæ</i> ....	14, 310
„ Cobalt ....	17, 72	„ „ <i>Seminum Coccognidii</i> ....	17, 95
„ Copper ....	17, 73	„ „ <i>Tanacetii</i> ....	14, 402
„ Ethyl ....	17, 83	„ „ <i>Tartari per deliquium</i> ....	3, 22
„ Iron ....	17, 72	„ „ <i>Vini</i> ....	13, 175
„ Lead ....	17, 72	Olibanum ....	17, 427
		„ oil ....	14, 390

- |                                                                   |                   |                                                                                               |         |
|-------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------|---------|
| Oligoclase ....                                                   | 3, 444            | Optical rotatory power of organic liquids....                                                 | 7, 64   |
| Olive, mannite in the ....                                        | 15, 540           | Orange-flower, oil of ....                                                                    | 14, 386 |
| „ oil ....                                                        | 17, 90            | „ -peel, oil of ....                                                                          | 14, 305 |
| „ oil, decomposition of, by oil of vitriol ....                   | 17, 87            | Orcein ....                                                                                   | 12, 358 |
| „ oil, solidification of, by the action of hyponitric acid on.... | 17, 75            | Orchil, syn. with Archil ....                                                                 | 12, 361 |
| Olivenite ....                                                    | 5, 472            | Orcin ....                                                                                    | 12, 353 |
| Olive-coloured compound of sodium....                             | 3, 116            | „ conjugated compounds of                                                                     | 12, 371 |
| Olivil ....                                                       | 16, 197           | „ hydrated ....                                                                               | 12, 355 |
| Olivin, Mulder's ....                                             | 15, 434           | „ Lead-compound of ....                                                                       | 12, 356 |
| Olivine ....                                                      | 3, 395            | „ Stearate of ....                                                                            | 17, 124 |
| Olivirutin ....                                                   | 16, 199           | „ with Sulphate of Quinine                                                                    | 17, 292 |
| Oncosine ....                                                     | 3, 448            | Oreoselone ....                                                                               | 12, 96  |
| Onocerin ....                                                     | 15, 40            | „ Angelate of ....                                                                            | 12, 98  |
| „ action of chlorine on....                                       | 15, 42            | Organic Acids, <i>see</i> Acids, Organic.                                                     |         |
| Ononetin ....                                                     | 17, 564           | „ Alkalis or Bases, <i>see</i> Alkaloids.                                                     |         |
| Ononide ....                                                      | 17, 61            | „ atom, compound relative position of the elementary atoms in ....                            | 7, 30   |
| Ononin ....                                                       | 15, 346 ; 17, 567 | „ bases, solutions of, in volatile oils ....                                                  | 7, 169  |
| Ononis-glycyrrhizin ....                                          | 17, 61            | „ bases, volatile, natural occurrence of ....                                                 | 13, 387 |
| Onospin ....                                                      | 15, 346 ; 17, 565 | „ bodies, spontaneous inflammation of ....                                                    | 7, 85   |
| Opacity ....                                                      | 1, 164            | „ chemistry, its subdivisions....                                                             | 7, 1    |
| „ of compounds ....                                               | 1, 94             | „ compounds, action of potash and soda on ....                                                | 13, 385 |
| Opal ....                                                         | 3, 352            | „ compounds, alteration of, by fermentation ....                                              | 7, 97   |
| Opaline allophane ....                                            | 3, 411            | „ compounds, arrangement of, in series ....                                                   | 7, 23   |
| Operment ....                                                     | 4, 273            | „ compounds, ash of ....                                                                      | 7, 85   |
| Ophite, &c. ....                                                  | 3, 395            | „ compounds, boiling points of ....                                                           | 7, 55   |
| Opiammone ....                                                    | 14, 435           | „ compounds, chemistry of ....                                                                | 7, 1    |
| Opianate of Ammonia ....                                          | 14, 429           | „ compounds, classification of ....                                                           | 7, 147  |
| „ Baryta ....                                                     | 14, 429           | „ compounds, colours of....                                                                   | 7, 64   |
| „ Ethyl ....                                                      | 14, 433           | „ compounds, components of ....                                                               | 7, 4    |
| „ Lead ....                                                       | 14, 429           | „ compounds containing nitrogen or chlorine, peculiar behaviour of, towards fixed alkalis.... | 7, 138  |
| „ Silver ....                                                     | 14, 429           | „ compounds, decomposition of, by the alkali-metals ....                                      | 7, 145  |
| Opianic acid ....                                                 | 14, 427           | „ compounds, decomposition of, by ammonia ....                                                | 7, 140  |
| Opianine ....                                                     | 16, 146           | „ compounds, decomposition of, by the basic oxides of the heavy metals ....                   |         |
| Opiansulphurous acid ....                                         | 14, 426           | „ compounds, decomposition of, by bromine ....                                                |         |
| Opianyl ....                                                      | 16, 422           |                                                                                               |         |
| Opianyl, stearate of ....                                         | 17, 124           |                                                                                               |         |
| Opium, estimation of Morphine in                                  | 16, 423           |                                                                                               |         |
| „ existence of Narcotine in                                       | 16, 136           |                                                                                               |         |
| „ methods of obtaining the principal constituents of              | 16, 419           |                                                                                               |         |
| „ percentage of Morphine in various sorts of ....                 | 16, 415           |                                                                                               |         |
| „ preparation of Codeine from ....                                | 17, 28            |                                                                                               |         |
| „ preparation of Meconic acid from ....                           | 12, 422           |                                                                                               |         |
| „ preparation of Morphine from ....                               | 16, 416           |                                                                                               |         |
| „ preparation of Narceine from ....                               | 17, 597           |                                                                                               |         |
| „ preparation of Papaverine from ....                             | 17, 257           |                                                                                               |         |
| Opoponax ....                                                     | 17, 427           |                                                                                               |         |
| Opposed galvanic batteries, effects of ....                       | 1, 484            |                                                                                               |         |

Organic compounds, decomposition of, by chloric acid ....	7, 125	tion of, by vanadic acid ....	7, 127
„ compounds, decomposition of, by chloric oxide gas ....	7, 125	Organic compounds, decomposition of, by water ....	7, 146
„ compounds, decomposition of, by chlorine ....	7, 119	„ compounds, elementary or ultimate analysis of ....	7, 86
„ compounds, decomposition of, by chromic acid ....	7, 126	„ compounds, elements occurring in ....	7, 5
„ compounds, decomposition of, by combustion ....	7, 84	„ compounds, even numbers of elementary atoms in ....	7, 6
„ compounds, decomposition of, by dry or destructive distillation....	7, 77	„ compounds, formation of, from inorganic materials ....	7, 38; 12, 477
„ compounds, decomposition of, by fixed alkalis ....	7, 133	„ compounds, formation of, from one another ....	7, 42
„ compounds, decomposition of, by hypochlorous acid ....	7, 125	„ compounds, formulæ of ....	7, 8
„ compounds, decomposition of, by iodic acid ....	7, 125	„ compounds, isomerism of ....	7, 66
„ compounds, decomposition of, by iodine ....	7, 122	„ compounds, Laurent's classification of ....	7, 23
„ compounds, decomposition of, by metallic chlorides ....	7, 130	„ compounds, metamerism of ....	7, 69
„ compounds, decomposition of, by nitric acid ....	7, 122	„ compounds, mode of combination of the elements in ....	7, 7
„ compounds, decomposition of, by passing their vapours through a red-hot tube ....	7, 83	„ compounds, physiological relations of ....	7, 66
„ compounds, decomposition of, by permanganate of potash ....	7, 127	„ compounds, primary or elementary ....	7, 5
„ compounds, decomposition of, by pentachloride of phosphorus ....	7, 130	„ compounds, primary, literature relating to ....	7, 2
„ compounds, decomposition of, by peroxides ....	7, 130	„ compounds, polymerism of ....	7, 67
„ compounds, decomposition of, by phosphoric acid ....	7, 129	„ compounds, properties of ....	7, 45
„ compounds, decomposition of, by sulphide of potassium ....	7, 145	„ compounds, rapid combustion of, in contact with substances containing oxygen loosely combined ....	7, 86
„ compounds, decomposition of, by sulphuric acid ....	7, 127	„ compounds, regarded as compounds of carbon ....	7, 5
„ compounds, decompositions and transformations of ....	7, 70	„ compounds, relations of, to light ....	7, 64
„ compounds, decompositions and transformations of, by hydrosulphuric acid ....	7, 145	„ compounds, specific gravity of ....	7, 46
„ compounds, decomposition of, by vanadic acid ....	7, 127	„ compounds, on the gaseous state ....	7, 52
		„ compounds, spontaneous decomposition of ....	7, 90
		„ compounds, state of aggregation of ....	7, 45
		„ compounds, substitution or metalepsy in ....	7, 71
		„ compounds, suggestions for a new nomenclature of ....	7, 149



Organic compounds, vapour- density of .... 7, 52	Osmic oxide, hydrated .... 6, 407
„ germs, action of, in pro- moting fermentation 7, 110	„ salts .... 6, 407
„ and inorganic bodies, points of distinction between .... 7, 1	„ sulphate .... 6, 412
„ kingdom, proximate principles of .... 7, 1	Osmide of Gold.... 6, 423
„ liquids, circular polari- sation in .... 7, 64	„ Iridium .... 6, 393, 423
„ liquids, refracting power of .... 7, 64	Osmioso-potassic sulphate .... 6, 417
„ matter in the air .... 2, 413	Osmious Bisulphite with chloride of potassium .... 6, 419
„ substances, formation of marsh-gas by the putrefaction and dry distillation of .... 7, 251	„ Nitrate .... 6, 415
„ substances, preservation of .... 7, 112	„ Oxide .... 6, 406
„ substances in the act of spontaneous decom- position, effect of, in inducing the combina- tion of hydrogen and oxygen .... 2, 57	„ „ hydrated .... 6, 406
Organised bodies, living phos- phorescence of .... 1, 181	„ Phosphate .... 6, 410
Origanum-oil .... 14, 391	„ Salts .... 6, 406
Orlean, <i>see</i> Annatto.	„ Sulphate .... 6, 411
<i>Oro Pudre</i> .... 6, 358	Osmitopsis, oil of .... 14, 337
Orpiment .... 4, 273	Osmium-amalgam .... 6, 422
Orseille, or Archil, preparation of .... 12, 361	„ Ammonio-sesquioxide .... 6, 415
Orsellate of Baryta .... 12, 372	„ Bichloride .... 6, 413
„ Ethyl .... 12, 373	„ Bioxide .... 6, 407
„ Methyl .... 12, 372	„ Bisulphide .... 6, 410
Orsellic acid .... 12, 371	„ Blue oxide .... 6, 406
„ preparation of orcin from .... 12, 353	„ Chlorides .... 6, 412
„ ether .... 12, 372	„ Five-halves sulphide .... 6, 410
Orthite .... 3, 424	„ Oxides .... 6, 406
Orthoclase .... 3, 441	„ Phosphide .... 6, 410
Osann's phosphori .... 1, 194	„ Protoxide of, with pot- ash .... 6, 417
Osmazome .... 18, 271	„ preparation of 6, 255, 264, 270, 405
Osmiamates .... 6, 415	„ Protochloride .... 6, 412
Osmiamic acid .... 6, 413	„ Protoxide .... 6, 406
Osmiate of Ammonia .... 6, 415	„ Salts, solubility of, in alcohol .... 8, 272
„ Lead .... 6, 421	„ Sesquioxide ? .... 6, 406
„ Lime .... 6, 421	„ „ of with potash .... 6, 417
„ Mercury .... 6, 422	„ spongy, effect of, in in- ducing the combination of hydrogen and oxy- gen .... 2, 52
„ Potash .... 6, 417	„ Sulphate of blue oxide of .... 6, 411
„ Tin ? .... 6, 421	„ Sulphides .... 6, 410
Osmiates .... 6, 410	„ Terchloride ? .... 6, 413
Osmic acid .... 6, 407	„ Teroxide .... 6, 407
„ compounds of, with other acids .... 6, 410	„ „ with potash .... 6, 417
„ hydrochlorate of .... 6, 413	„ Tersulphide .... 6, 411
„ oxide .... 6, 407	„ Tetrasulphide .... 6, 411
	„ and Mercury, chloride of .... 6, 422
	„ and Potassium, chlorides of .... 6, 418
	„ -iridium, treatment and analysis of .... 6, 262, 265, 268
	Ossein .... 18, 352
	Othyl, chloride.... 9, 195
	„ sulphide.... 9, 356
	„ thiacetate .... 9, 356
	„ -urea .... 9, 292

Otoba-fat ....	16, 395	Oxalate, Baryto-ferric....	9, 160
Otobite....	16, 395	„ of Benzidine ....	11, 341
Ottrelite ....	5, 287	„ Berberine ....	17, 195
Ovariolutein ....	18, 413	„ Bicinnamylamine ....	13, 306
Over-poled copper ....	5, 399	„ Biamidobenzoic acid	12, 150
Oxacids....	2, 18, 38	„ Bismuth 9, 150; 13, 524	
Oxalates 9, 120; 10, 533; 13, 515		„ Bismuth and Ammo-	
„ formation of, by fusing		„ nium ....	13, 524
starch, sawdust, bran,		„ Bismuth and Potas-	
wool, &c., with a		„ sium ....	13, 524
mixture of potash		„ Bromaniline ....	11, 279
and soda ....	13, 385	„ Brucine ....	17, 583
Oxalate of Acetonine ....	13, 378	„ Cadmammonium ....	13, 525
„ Acetylium ....	10, 540	„ Cadmium 9, 152; 13, 525	
„ Allyl ....	13, 545	„ Cadmium and Am-	
„ Alumina ....	9, 135	„ monium ....	13, 525
„ „ and Baryta 9, 135		„ Cadmium and Potas-	
„ „ and Potash 9, 135		„ sium ....	13, 526
„ „ and Soda.... 9, 135		„ Cadmium and So-	
„ „ and Strontia 9, 135		„ dium ....	13, 526
„ Amidonitraniline ....	9, 296	„ Calcio-chromic ....	9, 142
„ Ammonargentammo-		„ Calcio-ferric ....	9, 160
„ nium ....	13, 529	„ of Casein ....	18, 314
Oxalates of Ammonia ....	9, 122	„ Cerium ....	9, 134
Oxalate, Ammonio-antimonic		„ Chinoline ....	13, 251
9, 148; 13, 523		„ Chloraniline ....	11, 285
„ Ammonio-cadmie ....	10, 533	„ Chloromethylic ....	9, 175
„ Ammonio - chloroplati-		„ of Cinchonidine 17, 227, 613	
„ nous ....	9, 170	„ Cinchonine ....	17, 216
„ Ammonio-chromic ....	9, 138	„ Cobaltoso-cobaltic ....	9, 161
„ Ammonio-cobaltic ....	9, 162	„ Cobaltous ....	9, 160
„ Ammonio-cobaltoso-co-		„ Cobaltous, with Ammo-	
„ baltic ....	9, 163	„ nia ....	9, 161
„ Ammonio-cobaltous ....	9, 162	„ of Cocaine ....	16, 303
„ Ammonio-cupric		„ Codeine ....	17, 36
9, 165; 10, 535		„ Cumidine ....	13, 351
„ Ammonio-ferric ....	9, 158	„ Cupric ....	9, 164
„ Ammonio-magnesian ....	13, 519	„ Cupric, with Ammonia 9, 165	
„ Ammonio-manganous		„ Cuprous ....	9, 164
9, 147; 13, 521		„ of Cyanethine ....	13, 237
„ Ammonio-mercuric ?		„ Cyaniline ....	11, 362
9, 168; 13, 528		„ Cymidine ....	14, 219
„ Ammonio - mercurous ? 9, 168		„ Didymium....	9, 134
„ Ammonio-niccolic ....	9, 164	„ Ethyl ....	9, 178
„ Ammonio - oxyplatinous 9, 170		„ Ethyl, formation of	
„ Ammonio-palladious ....	9, 171	„ Glucose from ....	15, 310
„ Ammonio-stannous ....	9, 153	„ Ethylamine ....	9, 172
„ Ammonio-uranic ....	9, 145	„ Ethylene ....	13, 432
„ Ammonio-uranous ....	9, 144	„ Ferric ....	9, 157
„ Amylic ....	11, 72	„ Ferrous.... 9, 156; 13, 526	
„ of Antimony 9, 148; 13, 523		„ Fucusine ....	10, 383
„ Anthranilic acid ....	12, 328	„ of Furfurine ....	10, 381
„ Argento-chromic ....	9, 169	„ Glucina ....	9, 136
„ of Arsenious acid ? ....	9, 147	„ Glucina and Ammo-	
„ Arsenious acid and		„ nia ....	13, 520
Potash ....	13, 521	„ Guanine ....	10, 483
„ Asparagine ....	10, 249	„ Harmaline ....	16, 119
„ Baryta 9, 128; 13, 516		„ Harmine ....	16, 107
„ Baryto-chromic ....	9, 142	„ Hydrargethyl ....	10, 532

Oxalate of Lanthanum....	9, 134	Oxalate, Potassio-plumbic	9, 156
Oxalates of Lead	9, 154	„ Potassio-silver	9, 169
Oxalate of Lime	9, 130; 13, 517	„ Potassio-stannous	9, 154; 10, 534
„ Lime with Chloride		„ Potassio-uranic	9, 145
„ of Calcium	9, 132	„ Potassio-uranous	9, 145
„ Lithia	9, 127; 13, 515	„ of Quinidine	17, 301
„ Magnesia	9, 132; 13, 518	„ Quinine	17, 289, 616
„ Magnesia and Ammonia	9, 132	„ Seminaphthylamine	14, 109
„ Magnesio-chromic	9, 143	„ Silver	9, 169; 13, 528
„ Manganic	9, 146	Oxalates of Soda	9, 127
„ Manganous	9, 146	Oxalate of Soda, acid	13, 515
„ of Melaniline	11, 355	„ Soda and Potash?	9, 127
„ Mercurialine	18, 201	„ Sodio-antimonic	10, 533; 13, 523
„ Mercuric	9, 168	„ Sodio-chromic	9, 141
„ Mercurous	9, 167	„ Sodio-cupric	9, 166
„ of Methyl	9, 174	„ Sodio-ferric	9, 159
„ Methylamine	9, 172	„ Sodio-platinous	13, 529
„ Methylstrychnine	17, 510	„ Sodio-stannic	9, 154
„ Methyluramine	9, 358	„ of Solanine	18, 97
Oxalates of Molybdenum	9, 136	„ Stannic	9, 153
Oxalate of Naphthylamine	14, 100	„ Stannous	9, 152; 10, 534; 13, 526
„ Nickel	9, 163	„ Stibmethylethylum	13, 503
„ Nickel with Ammonia	9, 163	Oxalates of Strontia	9, 129; 13, 516
„ Nickel and Potassium	9, 164; 10, 534	Oxalate, Strontio-chromic	9, 142
„ Nicotine	14, 231	„ Strontio-ferric	9, 160
„ Nitroharmaline	16, 125	„ of Strychnine	17, 502
„ Nitrocodeine	17, 41	„ Tantalum	9, 136
„ Oxyacanthine	17, 199	„ Telluric	9, 150
„ Palladium	9, 171	„ of Tetravinylium	13, 490
„ Papaverine	18, 203	Oxalates of Thebaine	18, 209
„ Perchlorovinic	9, 242	Oxalate of Thebenine	18, 211
„ of Phloramine	15, 70	„ Thorina	9, 135
„ Picoline	11, 271	„ Thorina and Potash	9, 136
„ Platinic	9, 170	„ Titanium	9, 136
„ Platinous	11, 170	„ Toluidine	12, 336
„ Plumbo-chromic	9, 156	„ Uranic	9, 143
„ of Potash	9, 125	„ Uranous	9, 143
„ Potash and Ammonia?	9, 126	„ of Urea	9, 171
„ Potassio-antimonic	9, 149; 13, 523	Oxalates of Vanadium	9, 137
„ Potassio-cerous	9, 134	Oxalate, Vinomethylic	9, 182
„ Potassio-chromic	9, 140	„ of Yttria	9, 134
„ Potassio-cobaltoso-cobaltic	9, 163	„ Yttria and Potash	9, 135
„ Potassio-cobaltous	10, 534	„ Zine	9, 151
„ „ basic	9, 163	„ Zinco-ammonic	9, 151
„ Potassio-cupric	9, 166; 10, 535	„ Zinco-potassic	9, 151
„ Potassio-ferric	9, 158	„ of Zirconia	9, 136
„ Potassio-ferrous	13, 527	Oxalic acid	9, 111
„ Potassio-manganic	9, 147; 13, 521	„ action of, on salts	13, 514
„ Potassio-manganous	9, 147; 13, 522	„ aqueous	9, 120
„ Potassio-mercuric?	9, 169	„ aqueous, with Prussian blue	9, 172
		„ combinations of	9, 119
		„ constitution of	7, 36
		„ copulated acids produced by	7, 227
		„ decompositions	9, 115



Oxalic acid, formation of	9, 112; 13, 514	Oxide of Butyl....	10, 69
„ hydrated ....	9, 119	„ Cacodyl ....	9, 320; 13, 495
„ preparation of for-		„ Cadmium ....	5, 54
mic acid from ....	7, 273	Oxides of Calcium ....	3, 181
„ properties of ....	9, 114	Oxide, Carbonic ....	2, 87
„ ether ....	9, 178	Oxides of Cerium ....	3, 257
Oxalonitrates of Lead ....	9, 155	Oxide of Cetyl ....	16, 342
Oxalovinic acid ....	11, 183	„ Chloric ....	2, 309
Oxaluranilide ....	9, 315	Oxides of Chlorine ....	2, 294
Oxalurate of Cinchonine ....	17, 216	Oxide, Chlorocarbonic ....	2, 326
Oxaluric acid ....	9, 440	„ Chromic ..	4, 108
Oxamates ....	9, 260; 13, 536	„ Chromoso-chromic ....	4, 107
Oxamate of Allyl ....	13, 546	Oxides, classification of ....	2, 38
Oxamethane ....	9, 288	„ of Cobalt ....	5, 322
Oxamethylane ....	9, 177	Oxide, Cobaltic ....	5, 326
Oxamic acid ....	13, 535	„ Cobaltoso-cobaltic ....	5, 326
Oxamide ....	9, 262; 13, 536	Oxides of Copper ....	5, 402
Oxamyane ....	11, 115	Oxide, Cupric ....	5, 406
Oxanaphthalide ....	14, 128	„ Cuprous ....	5, 403
Oxanilamide ....	11, 312	„ of Didymium ....	3, 280
Oxanilates ....	11, 311	<i>Oxide d'Essène</i> ....	12, 85
Oxanilic acid ....	11, 310	Oxide of Ethyl....	8, 171
Oxanilide ....	11, 364	„ Ethyl, hydrated ....	8, 194
Oxanthracene ....	16, 169	„ Ethylene ....	13, 424
Oxatolyate of Ethyl ....	17, 154	„ Ethylene-stannethyl ....	9, 100
Oxatolyates, metallic ...	17, 154	„ Ferric ....	5, 194
Oxatolylic acid....	17, 153	„ Ferroso-ferric ....	5, 190
Ox-bile, preparation of Choles-		„ Ferrous ....	5, 187
terin from ....	18, 111	Oxides of Gold ....	6, 205
„ preparation of Glyco-		„ heavy metallic, electro-	
cholic acid from ....	18, 57	lysis of ....	1, 459
„ preparation of Tauro-		Oxide of Iodine ? ....	2, 251
cholic acid from ....	18, 65	„ Iridic ....	6, 373
Ox-fat ....	16, 397	„ Iridious ....	6, 371
Oxhaverite ....	3, 393	Oxides of Iridium ....	6, 370
Ox-horn, composition of ....	18, 348	„ Iron....	5, 184
Oxidation of organic compounds		Oxide of Isoprene ....	14, 331
by nitric acid ....	7, 122	„ Lanthanum ....	3, 275
„ by platinum-black ....	6, 280	„ Lead ....	5, 107
Oxide, Aceplatinous ....	9, 37	„ Magnesium ....	3, 222
„ of Acetostannethyl ....	9, 101	„ Manganic ....	4, 202
„ Allyl....	9, 363; 13, 539	„ Manganoso-manganic ....	4, 200
„ Aluminum ....	3, 304	„ Manganous ....	4, 197
„ Amyl ....	11, 7	„ Mercuric ....	6, 8
Oxides of Antimony ....	4, 323	„ Mercurous ....	6, 5
Oxide of Arsenethylum ....	9, 77	Oxides of Mercury ....	6, 5
Oxides of Arsenic ....	4, 252	Oxide of Mesityl ....	9, 25
Oxide of Arsentriethyl....	9, 74	Oxides, metallic, action of hydr-	
„ Auric ....	6, 207	acids on ....	2, 80
„ Aurous ....	6, 205	„ „ compounds of	
Oxides, basic, of the heavy		alizarin with ....	14, 139
metals, decomposition of or-		„ „ compounds of	
ganic compounds by the ....	7, 131	urea with ....	7, 375
Oxide of Bichlorobenzylene ....	12, 116	„ „ decomposition	
„ Biplumbic Triethyl ....	13, 512	of, by light ....	2, 172
„ Bisethyl ....	9, 89	Oxide of Methstannamyl ....	11, 132
Oxides of Bismuth ....	4, 428	„ Methstannbiamyl ....	11, 133
Oxide of Bistannamyl ....	11, 131	„ Methyl ....	7, 256; 10, 489
		„ „ hydrated ....	7, 258

Oxide of Methylene-stannethyl	9, 99	Oxidising properties of oxygen-	
„ Methyl-plumbethyl ....	9, 107	ated oil of turpentine	14, 508
„ Methyl-stannethyl ....	9, 102	„ rays of light....	1, 180
„ Molybdic ....	4, 51	Oxindicanin ....	16, 2
„ Molybdous ....	4, 49	Oxindicasin ....	16, 2
„ „ sulphates of ....	4, 62	Oxode ....	1, 431
Oxides of Nickel ....	5, 362	Oxoluin ....	18, 254
Oxide, Nitric ....	2, 377	Oxurates ....	10, 170
„ „ with Bichloride of		Oxuric acid ....	10, 169
Platinum ? ....	6, 295	Oxyacanthine ....	17, 197
Oxides of Nitrogen ....	2, 373—402	Oxyamide of Mercury ....	6, 78
Oxide, Nitrous....	2, 373	Oxybenzoic acid ....	12, 273
Oxides of noble metals, reduction		Oxybromides....	2, 9, 287
of, by formic acid ....	7, 275	Oxybromide of Cacodyl	9, 341
„ Osmium ....	6, 406	„ Cupric ....	5, 436
Oxide, Palladic ....	6, 345	„ Ferric ....	5, 251
„ Palladious ....	6, 342	„ of Lead ....	5, 144
Oxide, Paracacodylic ....	9, 242	„ Mercuric ....	6, 43
Oxide of Phosphorus ....	2, 110	„ of Tellurethyl	8, 385
„ Picramyl ....	12, 18	„ Tungsten ....	4, 34
Oxides of Platinum ....	6, 281	Oxychlorides ....	2, 9, 355
„ Potassium ....	3, 9	Oxychloride of Antimony	4, 367
Oxide of Protein ....	18, 263	„ Bismuth ....	4, 439
Oxides, reduction of, by peroxide		„ Cacodyl ....	9, 345
of hydrogen....	2, 77	„ Cerium....	3, 271
„ of Rhodium ....	6, 359	„ Chromium ....	4, 134
„ Ruthenium ....	6, 396	„ Cupric ....	5, 440
Oxide, Selenic ....	2, 236	„ of Ethylidene	13, 453
„ of Silicium ....	3, 352	„ Ferric ....	5, 255
Oxides of Silver ....	6, 138	„ Iridic ....	6, 381
Oxide of Silver and Lead	6, 195	„ of Lead ....	5, 146
Oxides of Sodium ....	3, 74	„ Mercuric ....	6, 59
Oxide of Stannethyl ....	9, 96	„ of Phosphorus	2, 330
„ Stannic....	5, 71	„ Palladious ....	6, 349
„ Stannous ....	5, 68	„ of Platinum, am-	
„ „ bihydrosulphate		monio-nitrate	6, 311
of....	5, 80	„ Platinum, am-	
„ „ hydrosulphate of	5, 78	monio - phos-	
„ of Stibethyl....	9, 81; 10, 524	phate	6, 309, 318
„ Stibmethylethylum ....	13, 500	„ Platinum, am-	
„ Stibtriamyl ....	11, 127	monio - sul-	
„ Tantalum ....	4, 23	phate	6, 310, 318
„ Telluramyl ....	11, 45	„ Selenethyl ....	8, 357
„ Telluric ....	4, 397	„ Stannous, hydrated	5, 87
„ of Telluromethyl	10, 493	„ of Tellurethyl	8, 387
„ Thorinum ....	3, 330	„ Telluromethyl ....	10, 494
„ Tin ....	5, 68	„ Thorinum ....	3, 335
„ Titanic ....	3, 471	„ Zinc ....	5, 31
„ Titanous ....	3, 469	„ Zirconium, hy-	
„ of Triethylphosphine	12, 523	drated	3, 346
„ Tungstic ....	4, 25	Oxychlorocitric acid ....	11, 470
„ Tungstous ....	4, 25	Oxychloronaphthalenose ?	14, 68
Oxides of Uranium ....	4, 159	Oxychloronaphthalose, <i>see</i> Chlor-	
Oxide, Vanadic, borate of	4, 90	ide of Chloroxynaphthalin	14, 68
Oxides of Vanadium ....	4, 82	Oxycinchonine ....	17, 231
Oxide of Yttrium ....	3, 283	Oxycuminate of Silver....	14, 152
„ Xanthic ....	10, 454	Oxycuminic acid ....	14, 151
„ of Zinc ....	5, 5	Oxycyanide of Lead ....	7, 427
„ Zirconium ....	3, 338	„ Mercury	8, 16

Oxyde de Brométhise ....	9, 188	Oxygen, solubility of, in alcohol	8, 258
Oxyfluoride of Cobalt ....	5, 338	„ sources of ....	2, 20
„ Ferric ....	5, 257	„ substitution of, for hy-	
„ of Lead ....	5, 151	drogen ....	7, 73
„ Nickel ....	5, 379	„ substitution of, for sul-	
„ Titanium ....	3, 482	phur ....	7, 76
Oxygen....	2, 19	„ -acids ....	2, 6
„ absorption of, by alkaline		„ -acids, aqueous, electro-	
solutions of pyrogallie		lysis of ....	1, 451
acid ....	11, 399	„ -acids, compound ethers	
„ absorption of, by organic		formed by ....	7, 215
compounds under the		Oxygenated water ....	2, 73
influence of alkalis ....	7, 133	Oxygen-bases ....	2, 6
„ absorption of, by melted		„ -circuit, Becquerel's ....	1, 335
silver ....	6, 138	„ -nuclei ....	7, 169
„ combination of, with		„ nuclei, Aldehydes of ....	7, 193
other bodies ....	2, 24	Oxygenoids ....	2, 18
„ combination of, with		Oxygen-salts, acid and basic ....	2, 7
combustible gases, ex-		„ -salts of the alkalis	
cited by contact with		and earths, electrolysis	
platinum and certain		of ....	1, 459
other metals....	2, 25	„ -salts, anhydrous com-	
„ combustion of, in an at-		pounds of, with Am-	
mosphere of hydrogen	2, 32	monia ....	2, 427
„ compounds of ....	2, 38	„ -salts, compounds of,	
„ compounds of, with Nu-		with Urea ....	7, 373
clei ....	7, 192, 196	„ -salts of heavy metallic	
„ development of heat and		oxides, electrolysis of	1, 463
light in the combina-		„ -salts, normal ....	2, 6
tion of, with other		Oxyhæmoglobin ....	18, 588
bodies ....	2, 27	Oxy-hydrogen blowpipe	2, 59
„ evolution of, from per-		Oxygasurine ....	17, 592
oxide of hydrogen ....	2, 76	Oxyiodides ....	2, 271
„ history of ....	2, 20	Oxy-iodide of Bismuth....	4, 437
„ and Hydrogen, combi-		„ Cacodyl ....	9, 430
nation of, <i>see</i> Hydro-		Oxy-iodide of Cobalt ....	5, 335
gen.		„ Lead ....	5, 141
„ liberation of, from car-		„ Mercury ....	6, 40
bonic acid by the green		„ Stibethyl ....	13, 449
parts of plants, under		„ Tellurethyl ....	8, 385
the influence of solar		„ Zinc ....	5, 28
light ....	1, 172	Oxymuriatic acid ....	2, 289
„ magnetic properties of....	1, 517	„ acid, liquid ....	2, 293
„ memoirs relating to ....	2, 19	Oxynaphthylamine ? ....	14, 101
„ in organic compounds ....	7, 5	Oxynaphthalidine, <i>see</i> Oxynaph-	
„ physical properties of ....	2, 24	thylamine.	
„ preparation of....	2, 20	Oxynitron ....	2, 16
„ proportion of, in atmos-		Oxyphenic acid....	11, 379
pheric air ....	2, 407	Oxypicric acid ....	11, 228
„ quantities of heat evolved		Oxypinitannic acid ....	15, 487
in the combination of		Oxyporphyrin acid ....	17, 184
different substances		Oxyprotein ....	18, 263
with ....	1, 292	Oxyquinine ....	17, 307
„ replacement of, by Ami-		Oxyrubian ....	16, 47, 61
dogen ....	7, 75	Oxysalicylic acid ....	16, 239
„ replacement of, by Nitro-		Oxyselenide of Antimony	4, 362
gen ....	7, 75	Oxysulphides ....	2, 9, 231
„ replacement of, by Sul-		Oxysulphide of Antimony	4, 359
phur ....	7, 76	„ Cerium ....	3, 267



Oxysulphide of Cobalt ....	5, 332	Oxyanthate of Lead ....	8, 463
„ Manganese ....	4, 219	„ Potassium ....	8, 461
„ Zinc ....	5, 20	„ Silver ....	8, 465
Oxysulphion ....	2, 16	„ Zinc ....	8, 463
Oxysulphocarbonate Ethylic ....	8, 439	Oxyxanthic acid ....	8, 461
„ Methamylic ....	11, 62	Oysters, green colouring matter	
„ Vinamylic ....	11, 62	of ....	18, 422
„ Vinomethylic ....	8, 444	Oyster-shells, residue left on di-	
Oxysulphocyanide of Bismuth....	8, 86	gesting, in dilute hydrochloric	
„ Ethyl ....	8, 490	acid ....	18, 372
„ Lead ....	8, 88	Ozocerite ....	18, 169
„ Mercury....	8, 95	Ozone ....	1, 449
Oxystyrychnine ....	17, 505	Ozonized Ethylene-air ....	8, 182
Oxythymoïl ....	15, 37	„ Oil of Turpentine ....	14, 256
Oxyxanthate of Copper ....	8, 464		

## P.

Packfong ....	5, 497	Palladium Bioxide ....	6, 345
<i>Pagurus latro</i> , oil obtained from	16, 322	„ Bromide ....	6, 348
Palicourin ....	18, 237	„ Carbide ....	6, 346
Palladic Chloride ....	6, 349	Palladite of Lime ? ....	6, 355
„ Oxide....	6, 345	Palladium, Phosphide ....	6, 346
Palladio-ammonic Nitrate ....	6, 353	„ preparation of	6, 255, 264, 340
„ -cyanide of Potassium....	8, 59	„ properties of ....	6, 341
„ -potassic Mellitate ....	10, 13	„ Protocyanide ....	8, 59
„ -potassic Nitrite ....	6, 355	„ Protochloride ....	6, 349
„ -potassic Sulphate ....	6, 353	„ Protosulphocyanide ....	8, 97
„ -sodic Nitrate ....	6, 355	„ reactions of.... of	6, 344, 346
Palladious Arseniate ....	6, 356	„ Protoxide ....	6, 342
„ Bromate ....	6, 348	„ Salts, solubility of, in	
„ Citrate ....	11, 461	alcohol ....	8, 272
„ Hydrate ....	6, 343	„ Selenide ....	6, 347
„ Hydrochlorate, basic	6, 349	„ spongy, effect of, in	
„ Chloride ....	6, 349	inducing the com-	
„ Iodide ....	6, 347	bination of hydro-	
„ Mellitate ....	10, 13	gen and oxygen ....	2, 52
„ Nitrate ....	6, 350	„ Sulphide ....	6, 346
„ Iodate ....	6, 348	„ and Iron, carbide of	6, 357
„ Oxalate ....	9, 171	„ and Sodium, melli-	
„ Oxide ....	6, 342	tate of ....	10, 13
„ Oxychloride ....	6, 349	Palmitic acid ....	16, 366
„ Phosphate ....	6, 346	Palmitamide ....	16, 382
„ Salts ....	6, 343	Palmitate of Ammonia ....	16, 360
„ Sulphate ....	6, 346	„ Amyl ....	16, 380
„ Tartrate ....	10, 326	„ Baryta ....	16, 361
Palladium ....	6, 340	„ Copper ....	16, 363
„ Alloys ....	6, 355	„ Ethyl ....	16, 375
„ Amalgam ....	6, 357	„ Lead ....	16, 362
„ Ammonio - protochlo-		„ Magnesia ....	16, 362
ride ....	6, 351	„ Melissyl ....	18, 153
„ Ammonio - protiodide	6, 350	„ Methyl ....	16, 373
„ Antimonite ...	6, 356	„ Mercury ....	16, 363
„ Arsenide ....	6, 356	„ Potash ....	16, 360
„ Benzoate ....	12, 45	„ Silver ....	16, 363
„ Bichloride ....	6, 349	„ Soda ....	16, 361
„ Bicyanide ....	8, 59		

Palmitic Acid, composition and properties of ....	16, 356	<i>Panacea mercurialis</i> , vel <i>cœlestis</i> , vel <i>Mercurii</i> ...	6, 45
„ decompositions of	16, 357	Panacone ....	15, 64
„ decomposition of, by chlorine ....	16, 357	Panaquilone ....	15, 64
„ decomposition of, by combustion	16, 357	Panoche-sugar ....	15, 241
„ decomposition of, by glycerin ....	16, 358	Panum's Acid-albumin ...	18, 261
„ decomposition of, by heat ....	16, 357	<i>Papaver somniferum</i> , oil from the seeds of ....	16, 312
„ decomposition of, by lime ....	16, 358	Papaveric acid ....	16, 528
„ decomposition of, mannite ....	16, 358	Papaverine ....	17, 257; 18, 202
„ decomposition of, by methylic, ethylic, and amylic alcohols ....	16, 358	Papaverosine ....	18, 204
„ decomposition of, by nitric acid....	16, 357	Paper, action of strong nitric acid on ....	15, 135
„ decomposition of, by peroxide of lead ....	16, 357	„ impregnated with bromide of silver, effect of light on ....	1, 176
„ decomposition of, by phosphoric anhydride ....	16, 357	„ impregnated with chloride of silver, effect of light on ....	1, 173
„ literature and history of ....	16, 350	„ impregnated with iodide of silver, effect of light on ....	1, 176
„ preparation of ....	16, 352	„ -parchment ....	15, 138
„ sources of ....	16, 352	Papin's Digester ....	1, 278
„ Aldehyde ....	16, 349	Para oil ....	16, 398
„ Ether ....	16, 375	Para-æsculetin....	18, 44
„ Lauric, and Myristic acids, melting and solidifying points of, mixtures of....	16, 364	Parabanate of Urea ....	13, 405
„ and Margaric acids, melting points of mixtures of....	16, 474	Parabanic acid....	9, 442
„ and Stearic acids, melting points and mode of solidification of mixtures of ....	17, 114	Paracacodylic oxide ....	9, 326
„ Stearic, and Myristic acids, melting points and mode of solidification of mixtures of ....	17, 114	Paracajputene ....	14, 511
Palmitins ....	7, 238; 16, 376	Paracamphoric acid ....	14, 463
Palmitone ....	16, 382	Paracarthamin....	16, 524
Palmitonic acid ....	16, 366	Paracellulose ....	15, 126, 144
Palm-oil or Palm-butter ....	16, 397	Paracelsus ....	1, 4
„ -oil, preparation of palmitic acid from ....	16, 353	Parachloronaphthalase....	14, 44
Palms, cane-sugar in ....	15, 240	Paracomenic acid ....	11, 410
Palm-wax ....	18, 161	Para-copaiba oil ....	14, 288
<i>Panacea duplicata</i> ....	4, 39	Paracyanide of Silver ....	11, 373
„ <i>holsatica</i> ...	3, 39	Paracyanogen ....	11, 371
		Paradigitaletin....	16, 330
		Paraffin ....	18, 165
		„ from bituminous shale	18, 167
		„ from Boghead coal ....	18, 167
		„ composition of ....	18, 169
		„ from earth-oil or petroleum ....	18, 168
		„ formation of, by destructive distillation of wood....	7, 43
		„ from peat ....	18, 167
		„ preparation of cerotic acid by oxidation of ....	18, 136
		„ Reichenbach's ...	18, 165
		Paraglobin ....	18, 271
		„ precipitation of, from diluted blood-serum by carbonic acid ....	18, 275
		Paraglobularetin ....	15, 39
		Paraglobulin ....	18, 271

- Paraglycocholic acid .... 18, 61  
 Paragonite .... 3, 451  
 Paraguay-tea, preparation of caffeine from .... 13, 227  
 Paralbumin .... 18, 281  
 Paramenispermene .... 17, 53  
 Paramide .... 10, 16  
 Paramidic acid .... 10, 20  
 Paramucic acid .... 11, 512  
 Paramylone .... 15, 122  
 Paranaphthalin, *see* Anthracene.  
 Paranocene .... 14, 142  
 Paranicine .... 14, 181  
 Paranitraniline.... 11, 288  
 Parapectic acid.... 15, 410  
 Parapectin .... 15, 399  
 Parapeptone .... 18, 336  
 Pararhodeoretin, *see* Jalapin.  
 Paratodo bitter .... 18, 237  
 Parasalicyl .... 12, 244  
 Parasulphate of ammonia .... 2, 460  
 Paratartaric acid .... 10, 346  
 Paratartralic acid .... 10, 361  
 Paratartrelie acid .... 10, 361  
 Parathionates .... 10, 517  
 Parchment, vegetable .... 15, 138  
 Parellic acid .... 16, 298  
 Paricine .... 17, 571  
 Paridin.... 18, 125  
 Paridol.... 18, 125  
 Parietic acid, *see* Chrysophanic acid.  
 Parietin, *see* Chrysophanic acid.  
 Pariglin .... 16, 99  
 Parillic acid, *see* Pariglin.  
 Paris Blue .... 7, 437  
*Paris quadrifolia*, fatty oil from the roots and seeds of .... 17, 97  
 Paris resin .... 18, 124  
 Paristyphnin .... 15, 346; 18, 126  
*Parmelia ceratophylla* var. *phy-sodes*, ceratophyllin from .... 15, 535  
 „ *parietina*, oil of .... 14, 391  
 „ „ preparation of chrysophanic acid from .... 16, 172  
 Parsley-camphor .... 15, 41  
 „ oil of .... 14, 307; 17, 97  
 „ preparation of apiin from.... 16, 94  
 Parting of Gold and Silver .... 6, 204  
 Partitions, imperfect, effect of, in the voltaic circuit 1, 486  
 „ or Interposed Plates, effect of, in the voltaic circuit .... 1, 478  
 Parvoline .... 13, 351  
 Passive state of Iron .... 1, 355, 360  
 Pastel-vat .... 13, 39  
 Pasteur's discoveries relating to circular polarisation in organic bodies... 7, 65  
 Pastinacine .... 18, 205  
 Paulite.... 3, 404  
*Pausus*, phosphorescence of .... 1, 185  
 Peach-leaf oil .... 12, 29  
 Pea-ore .... 5, 284  
 Pearlash .... 3, 14  
 Pearson's animal oxide .... 10, 456  
 Peas, composition of legumin from .... 18, 430  
 „ phosphoretted oil of .... 16, 487  
 „ preparation of cholesterin from .... 18, 112  
 Peat, distillation of .... 15, 154  
 „ humus substances in 17, 459, 471  
 „ resins of .... 17, 442  
 Pectate of Ammonia .... 15, 406  
 Pectates, metallic .... 15, 406  
 Pectate of Morphine .... 16, 436  
 Pectic acid .... 15, 401  
 „ compounds of, with salts .... 15, 409  
 „ (Sacc's) from wood 15, 413  
 Pectin, general view of the transformations of... 15, 397  
 „ memoirs relating to .... 15, 392  
 „ occurrence and formation of .... 15, 393  
 „ preparation of .... 15, 395  
 „ properties of .... 15, 396  
 Pectolactates .... 15, 231  
 Pectolite .... 3, 394  
 Pectosates .... 15, 401  
 Pectous substances, mutual relations of .... 15, 397  
*Peganum Harmala*, existence of harmaline in the seeds of .... 16, 116  
 „ preparation of harmine from .... 16, 104  
 Pelargonate of Ethyl .... 13, 372  
 Pelargonates, metallic .... 13, 370  
 Pelargone .... 13, 374  
 Pelargonene .... 13, 367  
 „ bichloride.... 13, 368  
 Pelargonic acid .... 13, 369  
 „ anhydride .... 13, 373  
 Pelargonium oil .... 14, 392  
 Pelargyl chloride .... 13, 377  
 Peliome .... 3, 434  
 Pelletier's Phosphorous acid 2, 120  
 Pelluteine .... 17, 27  
 Pelopiates .... 4, 22  
 Pelopic acid .... 4, 20



Pelopic acid, sulphate of	....	4,	22	Pentathionates....	....	2,	164
Pelopium	....	4,	20	Pentathionate of Baryta	....	3,	150
„ chloride	....	4,	22	„ Potash	....	3,	37
„ sulphide	....	4,	22	„ Silver-oxide	....	6,	153
Pelosine	....	17,	25	„ Soda	....	3,	99
<i>Penicillium glaucum</i>	....	7,	110	Pentathionic acid	....	2,	162
„ action of, in				„ action of, on mer-			
inducing lactous fermentation	15,	277		cury salts	....	6,	27
<i>Pennatula phosphorea</i> , phos-				Pepper oil	....	14,	307
phorescence of	....	1,	186	„ „ from Long Pepper	....	14,	308
Pennine	....	3,	420	„ preparation of piperine			
Pennyroyal, oil of	....	14,	352	from....	....	15,	19
Pentabasic arseniate of cupric				Peppermint-camphor	....	14,	449
oxide	....	5,	471	„ „ chlorinated	....	14,	453
Pentabromonaphthalin, bihydro-				„ crude oil of	....	14,	451
bromate of	....	14,	37	„ oil, stearoptene of	....	14,	450
Pentachloracetone	....	13,	465	Peptones	....	18,	263, 336
Pentachloride of Antimony	....	4,	369	Perauric acid	....	6,	209
„ Antimony with				Perbromide of Cacodyl, basic	....	9,	342
bichloride of				„ Potassium	....	3,	54
Sulphur	....	4,	370	Perchlorates	....	2,	318
„ Antimony, with				Perchlorate of Alumina	....	3,	317
cyanide of				„ Ammonia	....	2,	480
Ethyl	....	13,	457	„ Baryta	....	3,	161
„ Antimony, with				„ Brucine	....	17,	580
cyanide of				„ Cadmic oxide	....	5,	60
Methyl	....	13,	412	„ Cinchonine	....	17,	209
„ Antimony, with				„ Codeine	....	17,	33
phosphuretted				„ Cupric oxide	....	5,	442
Hydrogen....	4,	370		„ Ethyl	....	8,	467
„ Antimony, with				„ Ferrous oxide	....	5,	256
tersulphide of				„ Furfurine	....	10,	380
Antimony	....	4,	370	„ Lead-oxide	....	5,	148
„ Phosphorus	....	2,	329	„ Lime	....	3,	212
„ Phosphorus ac-				„ Lithia	....	3,	131
tion of, on				„ Magnesia	....	3,	243
glycol	....	13,	423	„ Manganous oxide	4,	230	
„ Phosphorus, ac-				„ Mercuric oxide	....	6,	62
tion of, on				„ Mercurous oxide	....	6,	62
organic com-				„ Morphine	....	16,	431
pounds	....	7,	130	„ Potash	....	3,	62
„ Phosphorus, sul-				„ Quinine....	....	17,	282
phate of	....	2,	341	„ Silver-oxide	....	6,	167
Pentachlorocaprylene	....	13,	216	„ Soda	....	3,	115
Pentadecetyl hydride	....	16,	534	„ Strontia	....	3,	179
Pentafluoride of Antimony	....	4,	371	„ Strychnine	....	17,	493
Pentaiodide of Arsenic....	....	4,	283	„ Uranous oxide	....	4,	182
„ Tetramethylum	10,	498		„ Zinc-oxide	....	5,	33
„ Trimethylethylum	13,	484		Perchloric acid....	....	2,	316
Pentanitro-itaconanilide	....	11,	369	Perchloride of Acetyl	....	9,	194
Pentasulphate of terchloride of				„ Cacodyl?	....	9,	346
sulphur	....	2,	343	„ Carbon, sulphite			
Pentasulphide of Ammonium	....	2,	452	of	2,	357; 7,	350, 354
„ Antimony	....	4,	354	„ Formyl....	....	7,	342
„ Calcium	....	3,	198	„ Formyl (so called)	9,	199	
„ Copper	....	5,	422	„ Phosphorus	....	2,	329
„ Lead	....	5,	134	Perchlorinated Ether, comcurent			
„ Phosphorus	....	2,	217	properties of	....	10,	537
„ Potassium	....	3,	34	„ Vinic Ether	....	9,	216

- Perchlorocarbonic Ether .... 9, 223  
 Perchloromethylic Acetate .... 9, 236  
 „ Formiate .... 9, 235  
 „ Oxalate .... 9, 176  
 Perchloronaphtalese, *see* Bihydro-  
 chlorate of Quadrichloronaph-  
 thalin .... 14, 62  
 Perchloronaphthalic acid .... 14, 69  
 Perchloronaphthalin .... 14, 64  
 Perchlororubian .... 16, 61  
 Perchlorosalicin .... 15, 448  
 „ compound of, with  
 bichlorosalicin 15, 449  
 Perchlorosuccinic Ether .... 10, 143  
 Perchlorovinic Acetate.... 9, 240  
 „ Formiate .... 9, 233  
 „ Oxalate.... 9, 242  
 Perchloroxalic Ether .... 9, 242  
 Perchloroxynaphthalin, Chloride of 14, 70  
 Perchromate of Quinine .... 17, 284  
 Perchromic acid .... 4, 120  
 Pereirine .... 17, 317  
 Pericline .... 3, 443  
 Periodates .... 2, 260  
 Periodate of Baryta .... 3, 155  
 „ Brucine .... 17, 579  
 „ Cinchonine .... 17, 208  
 „ Cupric oxide .... 5, 434  
 Periodates, Ferrous and Ferric.... 5, 250  
 Periodate of Lead-oxide .... 5, 144  
 „ Lime .... 3, 204  
 „ Lithia .... 3, 130  
 Periodates, Mercurous and Mer-  
 curic .... 6, 41  
 Periodate of Potash .... 3, 53  
 „ Quinine .... 17, 279  
 „ Silver-oxide .... 6, 158  
 „ Soda .... 3, 109  
 „ Strontia .... 3, 176  
 „ Strychnine .... 17, 492  
 „ Veratrine.... 18, 183  
 Periodic acid .... 2, 259  
 „ acid, solution of, in al-  
 cohol.... 8, 264  
 Periodide of Ammonium .... 2, 468  
 „ Calcium, hydrated 3, 203  
 „ Tellurium.... 4, 410  
 Permanent gases and vapours,  
 distinction between .... 1, 257  
 Permanganate of Ammonia .... 4, 231  
 „ Baryta .... 4, 241  
 „ Cupric oxide.... 5, 468  
 „ Lime .... 4, 242  
 „ Lithia .... 4, 241  
 „ Magnesia .... 4, 242  
 „ Potash .... 4, 235  
 „ Potash, action  
 of, on organic  
 compounds .... 7, 127  
 Permanganate of Silver-oxide .... 6, 186  
 „ Soda .... 4, 238  
 „ Strontia .... 4, 242  
 „ Zinc-oxide .... 5, 49  
 Permanganates, general proper-  
 ties of .... 4, 212  
 Permanganic acid .... 4, 209  
 „ acid, sulphate of? 4, 224  
 Permesitylo-sulphuric acid .... 9, 30  
 Perowskine .... 5, 302  
 Perowskite .... 3, 486  
 Peroxide of Acetyl .... 13, 446  
 „ Barium .... 3, 138  
 „ Benzoyl .... 13, 446  
 „ Bismuth .... 4, 431  
 „ Calcium .... 3, 185  
 „ Chlorine .... 2, 309  
 „ Cobalt .... 5, 322  
 „ Copper? .... 5, 413  
 „ Hydrogen .... 2, 73  
 „ Hydrogen, electro-  
 lysis of .... 1, 451  
 „ Hydrogen, emission  
 of light in the sud-  
 den decomposition of 1, 206  
 „ Iron .... 5, 194  
 „ Lanthanum .... 3, 278  
 „ Lead .... 5, 120  
 „ Lithium .... 3, 127  
 „ Manganese .... 4, 205  
 „ Manganese with Cu-  
 pric oxide.... 5, 468  
 „ Manganese with Pro-  
 toxide of Cobalt .... 5, 347  
 „ Nickel .... 5, 365  
 „ Nitrogen, *see* Hypo-  
 nitric acid.  
 „ Potassium .... 3, 16  
 „ Silver? .... 6, 145  
 „ Silver, nitrate of .... 6, 172  
 „ Sodium .... 3, 77  
 „ Stilbene .... 12, 178  
 „ Strontium .... 3, 170  
 „ Tin .... 5, 71  
 „ Zinc .... 5, 13  
 Peroxides .... 2, 40  
 „ action of, on organic  
 compounds .... 7, 30  
 Per-salts of Iron .... 5, 198  
 Persian berries, occurrence of  
 Xanthorhamnin in ripe .... 16, 72  
 Persio, *syn.* with Archil.  
 Persoz's law relating to the  
 colour of a compound 1, 96  
 „ laws relating to the for-  
 mation of chemical  
 compounds .... 1, 96  
 Perspiration, colouring matters  
 of .... 18, 422

Perspiration, phosphorescence of	1, 187	Phelene sulphide	.... 9, 394
Perselenide of Strontium	.... 3, 175	Phenakite	.... 3, 410
Persulphide of Allyl?	.... 9, 377	Phenamyol	.... 12, 272
"    Arsenic	.... 4, 280	Phenate of Methyl	.... 12, 261
"    Hydrogen	.... 2, 193	Phenetol	.... 12, 270
"    Hydrogen, iodu-		Phenidine	.... 12, 87
retted	.... 2, 268	Phenol, syn. with Carboic acid	11, 139
"    Lithium	.... 3, 129	Phenyl, Benzoate	.... 12, 86
"    Phosphorus	.... 2, 218	"    Chloride	.... 11, 173
"    Strontium	.... 3, 173	"    Chlorosulphate	.... 13, 455
Persulphocyanides	.... 8, 107	"    Cuminate	.... 14, 157
Persulphomolybdate of Ammo-		"    Cyanide	.... 12, 161
nium	.... 4, 68	"    Hydrate	.... 11, 139
"    Auric	.... 4, 237	"    "    preparation of,	
"    of Bismuth	.... 4, 448	according to Laurent	11, 143
"    Cadmium	.... 5, 65	"    Cenanthylate	.... 12, 454
"    Cerium	.... 4, 77	"    Anisyl and Hydrogen,	
"    Chromium	.... 4, 156	nitride of	.... 13, 145
"    Cobalt	.... 5, 347	"    and Bibenzoyl, nitride	
"    Copper	.... 5, 467	of	.... 12, 156
"    Ferric	.... 5, 298	"    Benzoyl and Hydrogen,	
"    Ferrous	.... 5, 298	nitride of	.... 12, 155
"    of Lead	.... 5, 168	"    and Citraconyl, nitride	
"    Manganese	.... 4, 247	of	.... 11, 321
"    Mercuric	.... 6, 112	"    and Maly, nitride of	.... 11, 319
"    Mercurous	.... 6, 112	"    Sulphobenzoyl and Hy-	
"    of Nickel	.... 5, 387	drogen, binitride of	.... 12, 160
"    Silver	.... 6, 183	"    and Pyrotartryl, nitride	
"    Stannic	.... 5, 101	of	.... 11, 326
"    Stannous	.... 5, 101	Phenylamine	.... 11, 246
"    Uranic	.... 4, 193	Phenylbenzamide	.... 12, 155
"    of Zinc	.... 5, 47	Phenylcarbamic acid	.... 12, 326
Persulphomolybdic acid	.... 4, 61	Phenyl-citraconimide	.... 11, 321
Peru Balsam	.... 17, 389	"    -citramide	.... 11, 469
"    oil of	.... 13, 283	"    -citrimide	.... 11, 467
"    preparation of cin-		"    -dibenzamide	.... 12, 156
namic acid from	13, 270	"    -ethyl-urea	.... 11, 333
Peruric acid	.... 10, 484	Phenylic chloride, sulphate of	.... 11, 175
Pervanadic acid?	.... 4, 89	Phenylimesatin	.... 13, 83
Petalite	.... 3, 445	Phenyl-itaconamide	.... 11, 369
<i>Petasites vulgaris</i> , resins of	.... 17, 451	"    -itaconimide	.... 11, 408
Petinine	.... 10, 150	"    -malamide	.... 11, 368
Petrified cork	.... 3, 407	"    -malimide	.... 11, 319
Petroleum	.... 12, 439	"    -naphthylamine, sulpho-	
"    American, hydro-		cyanide of	.... 14, 123
carbons obtained		"    -naphthyl, sulphocarpa-	
from	.... 16, 532	mide	.... 14, 123
"    paraffin from	.... 18, 168	"    -phthalamic acid	.... 13, 31
Peucedanin	.... 12, 98	"    -phthalimide	.... 13, 32
<i>Peucedanum Oreoselinum</i> , oil		"    -pyrotartrimide	.... 11, 326
of	.... 14, 308	"    -roccellamide	.... 16, 478
Peucyl, <i>see</i> Terebilene.		"    -valeramide	.... 11, 333
Pewter	.... 5, 103	<i>Philadelphus coronarius</i> , volatile	
Phacolite	.... 3, 431	oil from the flowers of	.... 14, 401
Phaconin	.... 18, 332	Phillipsine	.... 5, 489
Phæoretin	.... 16, 197	Phillipsite	.... 3, 451, 446
Phalene sulphide	.... 9, 394	Philygenin	.... 17, 525
Phaseomannite	.... 15, 352	Philyrin	.... 15, 347; 17, 526
Pheasant's fat	.... 16, 398	Phlobaphene	.... 15, 493



- Phlogistic theory .... 1, 4; 2, 35
- Phloramine .... 15, 69
- Phloretamic acid .... 13, 335
- Phloretate of Urea .... 13, 313
- Phloretates, metallic .... 13, 309
- Phloretic acid .... 13, 307
- Phloretin .... 15, 347; 16, 8
- Phloretol .... 13, 316
- Phlorizeïn .... 16, 17
- Phlorizeïn-ammonia .... 16, 18
- Phlorhizin .... 15, 347
- Phlorizin, or Phloridzin .... 16, 11
- „ hydrated .... 16, 15
- „ metallic derivatives  
of.... 16, 16
- Phloroglucin .... 15, 65
- Phocenin .... 11, 77
- Pholas dactylus*, phosphor-  
escence of ... 1, 185
- Pholerite .... 3, 414
- Phorone .... 13, 342, 471
- Phoryl, chloride .... 13, 343
- Phosgene .... 2, 326
- „ formation of urea by  
the action of am-  
monia on .... 13, 402
- „ solubility of, in alco-  
hol .... 8, 264
- Phosphacetic acid .... 9, 6
- Phosphamide .... 2, 438
- Phosphantimonic acid, reaction of,  
with cin-  
chonine 17, 216
- „ reaction of,  
with bru-  
cine .... 17, 581
- „ reaction of,  
with quin-  
ine .... 17, 284
- „ reaction of,  
with stry-  
chnine .... 17, 495
- Phosphates, in general.... 2, 131
- „ ordinary .... 2, 133
- „ action of oxalic acid  
on .... 13, 515
- „ alkaline, electrolysis  
of .... 1, 460
- „ Fleitmann and  
Henneberg's .... 2, 134
- „ of Alumina .... 3, 309
- „ „ and Li-  
thia .... 3, 326
- „ „ and Mag-  
nesia.... 3, 328
- Phosphate (ordinary) of Am-  
monia .... 2, 441
- „ of Amyl, tribasic .... 11, 527
- Phosphates of Aniline .... 11, 256
- Phosphate of Antimonic oxide.... 4, 336
- „ Arsenious acid .... 4, 271
- Phosphates of Baryta .... 3, 143
- Phosphate of Baryta with nitrate  
of baryta .... 3, 166
- „ Benzidine .... 11, 339
- „ Bismuth-oxide .... 4, 434
- „ Brucine .... 17, 578
- „ Cadmic oxide, or-  
dinary .... 5, 56
- „ Casein .... 18, 314
- „ Cerous oxide .... 3, 265
- „ Chelidonine .... 17, 165
- „ Chelerythrine .... 17, 159
- „ Chloraniline .... 11, 283
- „ Chromium .... 4, 123
- „ Cinchonidine .... 17, 223
- „ Cinchonine .... 17, 206
- „ Cobalt-oxide .... 5, 331
- „ Codeine .... 17, 32
- „ Cumidine .... 13, 349
- „ Cupric oxide .... 5, 418
- „ Cystine .... 9, 439
- „ Ethyl .... 8, 399
- „ Ethylamine and  
Magnesium .... 13, 480
- „ Ferrico-ammonic .... 5, 261
- „ of Ferric oxide .... 5, 225
- „ Ferric oxide and  
Ammonia .... 5, 261
- „ Ferric oxide and  
Manganic oxide 5, 303
- „ Ferroso-ammonic .... 5, 260
- „ of Ferrous oxide .... 5, 224
- „ Ferrous oxide and  
Ammonia .... 5, 260
- „ Furfurine .... 10, 378
- „ Glaucine.... 17, 161
- Phosphates of Glucina .... 3, 397
- Phosphate of Guanine .... 10, 481
- „ Harmaline .... 16, 117
- „ Hydrargethyl .... 10, 532
- „ Hydroberberine .... 17, 254
- „ Lanthanum-oxide 3, 278
- „ Lead-oxide .... 5, 130
- „ Lead-oxide with  
Hydrate of Alu-  
mina .... 5, 165
- „ Lead-oxide and  
Lime with Chlo-  
ride of Lead .... 5, 164
- Phosphates of Lime .... 3, 192
- Phosphate of Lime and Pot-  
ash .... 3, 215
- „ Lithia .... 3, 128
- „ Lithia and Ammo-  
nia .... 3, 132
- „ Lithia and Soda .... 3, 132
- „ Magnesia.... 3, 232

Phosphate of Magnesia and Ammonia ....	3, 245	Phosphate of Vanadic acid and Soda ....	4, 100
„ Manganic oxide ....	4, 217	„ Vanadic oxide ....	4, 90
„ Manganico-ferric ....	5, 303	„ Veratrine ....	18, 182
„ Manganoso-ferrous ....	5, 301	Phosphates of Yttria ....	3, 287
„ of Manganous oxide ....	4, 215	Phosphate of Zinc-oxide, ordinary ....	5, 17
„ Manganous oxide and Ammonia ....	4, 231	„ Zinc-oxide and Ammonia ....	5, 36
„ Manganous oxide and Ferrous oxide ....	5, 301	„ Zirconia ....	3, 344
„ Melaniline ....	11, 353	Phosphatic acid ....	2, 128
„ Menaphthylamine ....	14, 126	Phosphide of Aluminum ....	3, 309
„ Mercuric oxide ....	6, 18	„ Antimony ....	4, 335
„ Mercurous oxide ....	6, 17	„ Arsenic ....	4, 271
„ Methyl-strychnine ....	17, 508	„ Barium ....	3, 141
„ Molybdous oxide and Ammonia ....	4, 68	„ Bismuth ....	4, 433
„ Morphine ....	16, 430	„ Cadmium ....	5, 56
„ Naphthylamine ....	14, 98	„ Calcium ....	3, 189
„ Narcotine ....	16, 143	„ Carbon ? ....	2, 149
„ Nickel-oxide ....	5, 369	„ Cesium ....	3, 265
„ Nickel-oxide and Ammonia ....	5, 380	„ Chromium ....	4, 122
„ Nickel-oxide and Magnesia ....	5, 386	„ Cobalt ....	5, 329
„ Nicotine ....	14, 227	„ Copper ....	5, 415
„ Osmious oxide ....	6, 410	„ Glucinum ....	3, 297
„ Palladious oxide ....	6, 346	„ Gold ....	6, 210
„ Paricine ....	17, 572	„ Hydrogen, liquid ....	2, 148
„ Phosphoric oxide ....	2, 150	„ Iridium ....	6, 375
„ Potash, terbasic ....	3, 28	„ Iron ....	5, 222
„ Quinine ....	17, 276, 615	„ Lead ....	5, 128
„ Rhodic oxide ....	6, 361	„ Manganese ....	4, 214
„ Seminaphthylamine ....	14, 108	„ Mercury ....	6, 17
„ Silver-oxide ....	6, 148	„ Mercury, with Mercuric Nitrate ....	6, 76
Phosphates of Silver-oxide Fleitmann and Henneberg's ....	6, 151	„ Mercury, with Mercuric Sulphate ....	6, 32
Phosphate of Soda, ordinary ....	3, 90	„ Mercury, with Mercurous Nitrate ....	6, 75
„ Soda and Ammonia ....	3, 118	„ Nickel ....	5, 368
„ Soda and Potash ....	3, 119	„ Nitrogen ....	2, 436
„ Solanine ....	18, 95	„ Osmium ....	6, 410
„ Stannethyl ....	9, 97	„ Palladium ....	6, 346
„ Stannous oxide ....	5, 77	„ Platinum ....	6, 286
Phosphates of Strontia ....	3, 172	„ Potassium ....	3, 26
Phosphate of Strychnine ....	17, 490	„ Silver ....	6, 147
„ Tantalac acid ....	4, 4	„ Sodium ....	3, 89
„ Thorina ....	3, 332	„ Strontium ....	3, 171
„ Titanic oxide ....	3, 477	„ Thorium ....	3, 332
„ Uranic oxide and Cupric oxide ....	5, 468	„ Tin ....	5, 77
Phosphates of Uranic oxide ....	4, 171	„ Titanium ....	3, 476
Phosphate of Uranic oxide and Lime ....	4, 191	„ Tungsten ....	4, 32
„ Uranous oxide ....	4, 171	„ Vanadium ....	8, 90
„ Vanadic acid ....	4, 90	„ Yttrium ....	3, 286
„ Vanadic acid and Silica ....	4, 103	„ Zinc ....	5, 17
		Phosphides, metallic ....	2, 151
		Phosphite of Alumina ....	3, 309
		„ Ammonia ....	2, 441
		„ Amyl ....	11, 47
		„ Antimonic oxide ....	4, 336
		Phosphites of Baryta ....	3, 143

- Phosphite of Bismuth-oxide .... 4, 434  
 „ Cadmic oxide .... 5, 56  
 „ Chromic oxide .... 4, 123  
 „ Cobalt-oxide .... 5, 330  
 „ Cupric-oxide .... 5, 417  
 „ Ethyl and Barium 9, 360  
 „ Ethyl, tribasic .... 9, 358  
 „ Ferric oxide .... 5, 223  
 „ Ferrous oxide .... 5, 223  
 „ Glucina .... 3, 297  
 „ Lead-oxide .... 5, 129  
 „ Magnesia.... 3, 232  
 „ Magnesia and Am-  
 monia .... 3, 245  
 „ Manganous oxide.... 4, 215  
 „ Nickel-oxide .... 5, 368  
 „ Potash .... 3, 28  
 „ Soda .... 3, 90  
 „ Stannic oxide .... 5, 77  
 „ Strontia .... 3, 172  
 „ Titanic oxide .... 3, 477  
 „ Zinc-oxide .... 5, 17  
 Phosphites, general properties of 2, 119  
 Phosphobimethyl .... 7, 328  
 Phosphobromide, Mercuric .... 6, 45  
 Phosphocerite .... 3, 266  
 Phosphochloride of Mercury .... 6, 62  
 Phosphoglyceric acid .... 9, 492  
 Phosphomethylamine .... 7, 328  
 Phosphomolybdate of Ethylamine 13, 481  
 Phosphomolybdic acid, reaction  
 of, with bru-  
 cine .... 17, 581  
 „ acid, reaction  
 of, with  
 strychnine.... 17, 495  
 Phosphonitrate of Lead-oxide.... 5, 158  
 „ Mercurous-  
 oxide .... 6, 75  
 Phosphorescence .... 1, 162  
 „ of elastic fluids  
 produced by  
 compression 1, 205  
 „ by insolation or  
 irradiation 1, 193  
 „ by insolation,  
 colour of the  
 light of .... 1, 197  
 „ by insolation,  
 duration of 1, 196  
 „ of liquids, pro-  
 duced by  
 compression 1, 205  
 „ of living ani-  
 mals .... 1, 181  
 „ of living plants 1, 187  
 „ nature of .... 1, 181  
 „ of perspiration 1, 187  
 „ produced by pass-  
 ing the elec-  
 tric discharge  
 through bodies 1, 198  
 Phosphorescence produced by  
 pressure on  
 pulverised  
 bodies .... 1, 204  
 „ of putrefying  
 animals .... 1, 189  
 „ of putrefying  
 fish.... 7, 104  
 „ of putrefying  
 fish, interrup-  
 tion of, by a  
 freezing tem-  
 perature .... 1, 190  
 „ of putrefying  
 plants .... 1, 191  
 „ of the sea .... 1, 186  
 „ of solid bodies  
 produced by  
 tearing, split-  
 ting, or rub-  
 bing .... 1, 203  
 „ steady, of plants 1, 188  
 „ sudden, of cer-  
 tain yellow  
 flowers .... 1, 187  
 „ how affected by  
 temperature 1, 197  
 „ of urine .... 1, 187  
 Phosphoretted Brain-fat (Mül-  
 ler's) .... 16, 484  
 „ Fats .... 16, 483  
 „ Hydrogen, *see*  
 Phosphuretted  
 Hydrogen.  
 „ Oil of Peas .... 16, 487  
 Phosphoric acid .... 2, 121  
 „ „ action of, on  
 alcohol .... 8, 242  
 „ „ action of, on  
 organic com-  
 pounds .... 7, 129  
 „ „ compound of,  
 with iodic acid 2, 265  
 „ „ copulated acids  
 produced by,  
 with alcohol  
 and glycerin 7, 324  
 „ „ crystallised .... 2, 126  
 „ „ electrolysis of 1, 451  
 „ „ glacial .... 2, 125  
 „ „ impurities in .... 2, 131  
 „ „ ordinary, hy-  
 drate .... 2, 126  
 „ „ ordinary, pre-  
 paration of,  
 solution of .... 2, 127



Phosphoric Acid, purification of	2, 130	Phosphorus Pentachloride, action	
„ Chloride ....	2, 329	of, on glycol ....	13, 423
„ Ether ....	8, 171, 399	„ Pentachloride, action	
„ Hyposulphide ....	2, 212	of, on organic com-	
„ Oxide ....	2, 110	pounds ....	7, 130
„ „ compound of,		„ Pentachloride, sul-	
with ammonia	2, 440	phate of ....	2, 341
„ „ compound of,		„ preparation of ....	2, 103
with potash	3, 27	„ preparation of phos-	
„ Phosphate ....	2, 150	phoric acid by oxi-	
„ Salt ....	3, 118	dation of, with	
„ Sulphide ....	2, 217	nitric acid ....	2, 127
Phosphorocalcite ....	5, 418	„ properties of ....	2, 106
Phosphorous acid ....	2, 115	„ purification of ....	2, 105
„ „ copulated acids		„ Realgar- ....	1, 194
produced by,		„ red or amorphous ....	2, 108
with alcohol		„ Selenide ....	2, 242
and fusel-oil	7, 224	„ and Silver, sulphide	
„ Chlorides ....	2, 338	of ....	6, 155
„ Hyposulphide ....	2, 209	„ sources of ....	2, 103
„ Sulphide ....	2, 215	„ with Stannic Chlo-	
Phosphorus ....	2, 100	ride ....	5, 89
„ Ammonio-pentachlo-		„ solubility of, in vola-	
ride of ....	2, 483	tile oils ....	7, 168
„ Ammonio-terbromide		„ solution of, in alco-	
of ....	2, 470	hol ....	8, 263
„ Ammonio-terchloride		„ Strontian-....	1, 193
of ....	2, 481	„ sulphides of	2, 207—219
„ Antimonial ....	1, 194	„ Terbromide, expan-	
„ Arsenical ....	1, 194	sion of, by heat	
„ Baldwin's ....	1, 194	1, 226, 229, 230	
„ in bar-iron ....	5, 205	„ Terchloride, action of,	
„ Bonnonian ....	1, 193	on alcohols, ethers,	
„ Bromide of ....	2, 281	acids, &c....	10, 487
„ Canton's ....	1, 193	„ Terchloride, action	
„ in cast-iron ....	5, 214	of zinc-ethyl on ....	12, 521
„ Chlorides ....	2, 328, 329	„ Terchloride, action	
„ Chlorosulphide of ....	2, 334	of zinc-methyl on	12, 491
„ commercial, impu-		„ Terchloride, com-	
rities in ....	2, 104	pound of, with	
„ compounds of, with		cyanide of methyl	13, 411
hydrogen ....	2, 135	„ Terchloride, expan-	
„ compounds of, with		sion of, by heat	
oxygen ....	2, 110	1, 226, 229, 230	
„ Cyanide ....	8, 147	„ Wach's ....	1, 194
„ Ethyl-bases contain-		„ white ....	2, 107
ing ....	13, 492	Phosphosulphate of Ferric oxide	5, 246
„ Fluoride of ....	2, 364	Phosphotrimethylamine	7, 328
„ history of ....	2, 102	Phosphovinates ....	8, 399
„ Homberg's	1, 194; 3, 206	Phosphovinic acid ....	8, 399
„ Iodide of ....	2, 265	Phosphuret of Baryta ....	3, 139
„ luminosity of, in the		„ Lime ....	3, 187
air ....	2, 117	Phosphuretted Hydrogen, absorp-	
„ memoirs relating to	2, 100	tion of, by alcohol	8, 263
„ Methyl-bases con-		„ Hydrogen, Chloro-	
taining	7, 328; 13, 492	stannate of ....	5, 89
„ Oxychloride of ....	2, 330	„ Hydrogen with	
„ Organic bases con-		Chloride of Alu-	
taining ....	10, 488	minum ....	3, 317

Phosphuretted Hydrogen with Chloride of Titanium ....	3, 480	Piauzite ....	17, 440
„ Hydrogen gas, decomposition of	2, 140	Picamar ....	15, 162
„ Hydrogen gas, difference of inflammability of the two varieties of	2, 144	Pichrolichenin ....	15, 55
„ Hydrogen gas, formation of ....	2, 136	Pichurates, <i>see</i> Laurates.	
„ Hydrogen gas, preparation of....	2, 138	Pichurim beans, preparation of	
„ Hydrogen gas, properties of ....	2, 140	Lauric acid from ....	15, 45
„ Hydrogen, Hydriodate of ....	2, 265	„ fat ....	16, 398
„ Hydrogen, Hydrobromate of	2, 283	Pickling of meat with salt and	
„ Hydrogen, Hydrochlorate of ....	2, 331	nitre ....	7, 117
„ Hydrogen and Hydrochloric acid with Chloride of Titanium	3, 481	Picoline ....	11, 263
„ Hydrogen with Pentachloride of Antimony ....	4, 370	„ Acetate ....	11, 271
„ Hydrogen, Sulphate of ....	2, 220	„ Butyrate ....	11, 271
„ Sulphide of Carbon ....	2, 219	„ Chloroplatinate ....	11, 270
Phthalamie acid ....	13, 30	„ Copper-salts ....	11, 269
Phthalamine ....	13, 21	„ Cupro-acetate ....	11, 271
Phthalates ....	13, 12	„ decompositions of ....	11, 267
Phthalic acid ....	13, 10	„ formation of ....	11, 263
„ anhydride ....	13, 14	„ Gold-salts ....	11, 270
Phthalidine ....	13, 33	„ Hydrochlorate....	11, 268
Phthalamates ....	13, 30	„ Hydriodate ....	11, 268
Phthalimide ....	13, 31	„ Mercury-salts ....	11, 269
Phycic acid ....	18, 238	„ Nitrate ....	11, 268
Phycite....	12, 385	„ Oxalate ....	11, 271
Physalin ....	16, 191	„ Platinum-salts ....	11, 270
<i>Physalin</i> , phosphorescence of ....	1, 184	„ preparation of....	11, 264
Physetoleate of Ethyl ....	16, 319	„ properties of ....	11, 266
Physetoleic acid ....	16, 317	„ Salts ....	11, 267
<i>Physeter macrocephalus</i> , sperm oil obtained from ....	16, 321	„ Sulphate ....	11, 268
Physiological relations of chemical compounds ....	1, 96	„ Sulphite ....	11, 268
„ relations of organic compounds ....	7, 66	Picramic acid ....	11, 243
Physiology, Chemical, subjects of	7, 1	Picramide ....	11, 245
Physodin ....	15, 57	Picramyl, Nitride of ....	12, 191
Physostigmine ....	18, 205	„ oxide ....	12, 18
Phyteumacolla ....	18, 451	Picrate of Ammonia ....	11, 220
Phytocoll ....	18, 451	„ Aniline ....	11, 263
<i>Phytolacca, decandra</i> , phosphorescence of ....	1, 188	„ Baryta ....	11, 211
		„ Berberine ....	17, 196
		„ Chinoline ....	13, 253
		„ Cinchonine ....	17, 219
		„ Cobalt ....	11, 225
		„ Cocaine ....	16, 303
		„ Copper ....	11, 226
		Picrates of Lead ....	11, 223
		Picrate of Lime ....	11, 222
		„ Magnesia ....	11, 222
		„ Manganese ....	11, 222
		„ Mercuric ....	11, 227
		„ Mercurous ....	11, 227
		„ Morphine ....	16, 436
		„ Nickel ....	11, 226
		„ Oxyacanthine ....	17, 199
		„ Potash ....	11, 220
		„ Quinidine ....	17, 392
		„ Quinine ....	17, 292
		„ Silver ....	11, 227
		„ Sparteine ....	13, 154
		„ Soda ....	11, 211
		„ Solanine ....	18, 98
		„ Strontia ....	11, 222

Picrate of Strychnine ....	17, 504	<i>Pinus Dammara</i> , resin of ....	17, 335
„ Zinc ....	11, 223	„ <i>maritima</i> , turpentine	
Picric acid ....	11, 211	„ from ....	18, 17
„ acid, compound of, with		„ <i>Picea</i> , hardened white	
anthracene ....	16, 167	resin from the	
„ ether ....	11, 227	trunk of ....	18, 16
Picril ....	12, 186	„ „ oil from the seeds	
Picroerythrin ....	12, 380	of ....	16, 316
Picropharmacolite ....	4, 308	„ <i>sylvestris</i> , Kavalier's	
Picrophyll ....	3, 398	resin from	15, 34
Picrosmine ....	3, 397	„ „ oil from the	
Picrotoxin ....	14, 473	seed of ....	16, 315
„ compound of, with		„ „ phlobaphene	
Brucine ....	17, 585	from the	
„ with Strychnine ....	17, 504	outer bark	
Pierre's experiments on the ex-		of ....	15, 494
pansion of liquids ....	1, 225	„ „ resin from the	
Pig-bile, colouring matter of ....	18, 80	stem of ....	18, 15
„ preparation of hyogly-		Pine-resins, constituents of ....	18, 2
cocholic acid from ....	18, 102	„ -sugar ....	15, 212
„ preparation of neurine		Pinguite ....	5, 287
or choline from ....	18, 380	Pinic acid ....	18, 9
Pig-iron or cast-iron ....	5, 210	Pinicorretin ....	15, 33
„ -iron, molybdenum in ....	5, 297	Pinicortannic acid ....	15, 491
„ -lead ....	5, 106	Pinipierin ....	15, 347 ; 16, 26
Pigment, black, of the eye ....	18, 417	Pinitannic acid ....	15, 488
„ green, from jaundiced		Pinitartaric acid ....	15, 214
urine ....	18, 80	Pinite ....	3, 437 ; 15, 212
„ of pigs' bile ....	18, 80	Pinityl, bistearate of ....	17, 125
„ serpents' bile ....	18, 80	„ quadristearate of ....	17, 126
Pigments of the bile ....	18, 69	<i>Pinus sylvestris</i> , resins and wax	
„ birds' feathers ....	18, 419	from the bark	
„ urinary ....	18, 407	of ....	18, 15
<i>Pigmentum indicum</i> ....	13, 36	„ tannic acids	
Pilchard oil ....	16, 322	from ....	15, 487
Pile of two elements, Zamboni's	1, 427	„ turpentine from	18, 14
Pimaric acid ....	17, 323	„ <i>tæda</i> , turpentine from ....	18, 19
Pimelate of Amyl ....	12, 466	Piperate of Piperidine ....	15, 14
„ Baryta ....	12, 465	Piperates, metallic ....	15, 9
„ Copper ....	12, 465	Piperic acid ....	15, 7
„ Ethyl ....	12, 465	Piperidine ....	10, 446 ; 15, 13
„ Silver ....	12, 465	„ with sulphide of	
Pimelic acid ....	12, 463	carbon ....	15, 15
Pimento, oil of ....	14, 210	„ -urea ....	15, 15
<i>Pimpinella Anisum</i> , volatile oil		Piperine ....	15, 18
of ....	14, 191	Piperyl-sulphocarbonate of pi-	
Pimpinella, oil of ....	14, 392	peridine ....	15, 15
<i>Pimpinella saxifraga</i> , resin of	17, 451	„ -urea ....	15, 15
Pinacone ....	13, 469	Pipitzahoic acid ....	16, 264
Pinates ....	18, 12	Pissophane ....	3, 312
Pinchbeck ....	5, 479	<i>Pistacia Lentiscus</i> , fat of ....	16, 398
Pine-bark, jelly from ....	13, 240	„ resin of ....	17, 423
„ -mastic ....	18, 15	Pistacite ....	3, 430
„ -needles, jelly from ....	13, 239	Pitch, black ....	15, 151, 153
Pink-salt ....	5, 94	Pitchblende, uranium in ....	4, 157
Pinonic acid ....	18, 20	Pit-gas ....	7, 249
<i>Pinus Abies</i> , turpentine from ....	18, 17	Pitoyine ....	17, 317
„ <i>balsamea</i> , turpentine		Pittacal ....	15, 163
from ....	18, 19	Pittizite ....	5, 308



Pityxylic acid	....	....	15, 493	Platinic Hydrochlorate	....	6, 295
Placodine	....	....	5, 388	„ Hydrofluat	....	6, 296
Plagionite	....	....	5, 176	„ Iodate....	....	6, 292
<i>Planaria retusa</i> , phosphorescence				„ Iodide....	....	6, 291
of	....	....	1, 185	„ Oxide	....	6, 283
<i>Plantago</i> , ferment-oil of various				„ Persulphomolybdate	....	6, 331
species of	....	....	14, 406	„ Salts	....	6, 283
Plant-albumin	....	....	18, 426	„ Silicofluoride	....	6, 330
„ -casein	....	....	18, 425	„ Sulpharsenate	....	6, 332
„ -fibrin,	....	....	18, 425, 448	„ Sulpharsenite	....	6, 332
„ -gelatin	....	....	18, 445	„ Sulphate	....	6, 290
„ -lice, fats of	....	....	16, 398	„ Sulphide	....	6, 287
Plants, electric currents in	....		1, 336	„ Sulphomolybdate	....	6, 331
„ living, phosphorescence				„ Sulphotellurite	....	6, 333
of	....	....	1, 187	„ Sulphotungstate	....	6, 331
„ occurrence of manganese				Platinico-aluminic sulphate	....	6, 330
in	....	....	4, 195	„ -barytic sulphate	....	5, 327
„ phenomena exhibited by				„ -potassic nitrate	....	6, 323
soft parts of, during				„ „ sulphate	....	6, 321
fermentation....	....		7, 101	„ -sodic nitrate	....	6, 326
„ putrefying, phosphor-				„ „ sulphate	....	6, 325
escence of	....	....	1, 191	Platinidecyanide of Ammonium....		8, 47
„ volatile acrid principles				„ Potassium	....	8, 49
of	....	....	14, 471	„ Silver	....	8, 58
Plasmin	....	....	18, 320	Platiniferous sand	....	6, 253
Plaster of Paris	....	....	3, 201	Platinite of Potash	....	6, 320
<i>Platanus acerifolia</i> , phlobaphene				„ Soda	....	6, 323
from the				Platinizing by galvanic precipita-		
bark of	....		15, 495	tion	....	1, 500
„ wax from				Platinocyanides	10, 506 ; 12, 498	
bark of	....		18, 161	Platinocyanide of Ammonium		8, 46 ; 10, 506
Plate-glass, coloration of, by				„ Barium		8, 52 ; 10, 508
exposure to light	....	....	1, 170	„ Calcium		8, 53 ; 10, 508
Plates, description of	....		1, 12, 13	„ Cobalt with		
„ interposed, effect of, on the				Ammonia	....	8, 55
voltaic circuit	....		1, 478	„ Copper		8, 55 ; 10, 509
Platina, crude	....	....	6, 253	„ Ethyl	....	13, 459
Platinamine	....	....	6, 314	„ Ethylammo-		
„ bihydrochlorate			6, 306, 314	nium	....	13, 460
„ nitrates	....	....	6, 311, 315	„ Diplatosam-		
„ sulphate	....	....	6, 314	monium	....	8, 45
Platinate of Ammonia	....	....	6, 296	„ Magnesium		8, 53 ; 10, 509
„ Baryta	....	....	6, 327	„ Mercury		8, 57 ; 10, 510
„ Lime	....	....	6, 328	„ Nickel with		
„ Potash	....	....	6, 320	Ammonia	....	8, 55
„ Soda	....	....	6, 324	„ Potassium		8, 47 ; 10, 507
„ Strontia	....	....	6, 328	„ Silver	....	8, 58
Platinhydrocyanate of Amidoni-				„ Sodium		8, 52 ; 10, 507
traniline	....	....	11, 295	„ Strontium	....	10, 508
Platinic Ammonio-nitrate ?	....		6, 311	„ Zinc with Am-		
„ Arseniate	....	....	6, 332	monia	....	8, 55
„ Ammonio-sulphate	....	....	6, 299			
„ Bromide	....	....	6, 292			
„ Chloride	....	....	6, 294			
„ Chromate	....	....	6, 331			
„ Cyanide with hydro-						
cyanate of quinine	....		17, 287			
„ Hydrate	....	....	6, 283			

Platinode ....	1, 431	Platinum Ammonio - protochloride ....	6, 300
Platinopicoline ....	11, 271	„ Ammonio-protocyanide .....	8, 45
Platino-platinidecyanide of Aluminium ....	8, 55	„ Ammonio-protochloride ....	6, 296
„ -platinidecyanide of Ammonium ....	8, 46	„ Antimonide ....	6, 333
„ -platinidecyanide of Barium ....	8, 52	„ Arsenide ....	6, 332
„ -platinidecyanide of Calcium ....	8, 53	„ Benzoate ....	12, 45
„ -platinidecyanide of Copper ....	8, 56	„ Bibromide ....	6, 292
„ -platinidecyanide of Iron .....	8, 55	„ Bichloride ....	6, 294
„ -platinidecyanide of Lead .....	8, 55	„ Bichloride with Bi-	
„ -platinidecyanide of Magnesium ....	8, 54	cinamylamine ....	13, 306
„ -platinidecyanide of Potassium ....	8, 48	„ Bichloride with Bi-	
„ -platinidecyanide of Sodium ....	8, 52	phenaniline....	11, 335
„ -platinidecyanide of Strontium ....	8, 53	„ Bichloride with Cy-	
Platinopyridene ....	10, 407	anide of Ethyl ....	13, 457
Platinosquesquicyanides ....	12, 499	„ Bichloride with Lo-	
Platinoso-ammonic sulphate ....	6, 298	phine ....	12, 203
„ -potassic sulphate ....	6, 321	„ Bichloride with Ni-	
„ -sulphite ....	6, 321	tric oxide?....	6, 295
„ -sodic sulphate ....	6, 324	„ Bichloride with Sul-	
Platinosulphate of Ethylamine ....	9, 61	phethyl ....	8, 339
Platinous Acetate ....	8, 334	„ Bicyanide with Chloride of Ammonium....	8, 47
„ Ammonio-carbonate ....	6, 298	„ Bicyanide with Chloride of Potassium ....	8, 51
„ Ammonio-nitrate ....	6, 310	„ Bifluoride of....	6, 296
„ Ammonio-sulphate ....	6, 298	„ Biniodide ....	6, 291
„ Bromate ....	6, 293	„ Bisulphide ....	6, 287
„ Chloride ....	6, 293	„ Bisulphocyanide ....	8, 97
„ Cyanide ....	8, 43	„ -black ....	6, 277
„ Hydrate ....	6, 281	„ -black, effect of, in inducing the combination of hydrogen and oxygen ....	2, 51
„ Iodide ....	6, 290	„ blue oxide ....	6, 282
„ Nitrate ....	6, 296	„ Boride? ....	6, 286
„ Oxide ....	6, 281	„ Bromides ....	6, 202
„ Oxide with Borax ....	6, 324	„ Camphorate ....	14, 463
„ Oxide with Glass ....	6, 331	„ Carbide ....	6, 285
„ Salts ....	6, 282	„ Chlorides ....	6, 293
„ Sulphate ....	6, 289	„ Chlorides, hydrocarbonated ....	8, 388
„ Sulphide ....	6, 286	„ Chloriodide?....	6, 295
„ Sulphite? ....	6, 289	„ Chlorosulphide? ....	6, 295
Platinum ....	6, 252	„ Chrysammate ....	12, 7
„ Acechloride ....	9, 31	„ combustion induced by .....	2, 25
„ Amalgam ....	6, 338	„ Cyanides ....	8, 43
„ Ammonio-compound of Ethylchloride of ....	8, 390	„ Cyanide, compound of, with Casein ....	18, 318
„ Ammonio-bichloride ....	6, 305	„ Ethylchloride ....	8, 388
„ Ammonio-biniodide ....	6, 297	„ Ethylchloride with Chloride of Potassium ....	8, 391
„ Ammonio-chlorobromide ....	6, 306	„ Ethylchloride with Chloride of Sodium....	8, 392
„ Ammonio-nitrate of oxychloride....	6, 311	„ Ethylchloride with Sal-ammoniac ....	8, 391
„ Ammonio-protiodide ....	6, 299	„ -deposits on Copper and Brass ....	6, 276

Platinum-deposits, detonating ....	8, 387	Platinum-salts, solubility of,	
„ „ on glass ....	7, 275	„ in alcohol ....	8, 272
„ Fluorides ....	6, 296	„ Selenide ....	6, 290
„ Fulminating ....	6, 297	„ separation of, from	
„ general theory of the		gold by fusion with	
ammoniacal com-		nitre ....	6, 203
pounds of ....	6, 313	„ Sesqui-iodide ....	6, 291
„ inflammable or de-		„ Silicide ....	6, 330
tonating chloride of	8, 388	„ Spongy ....	6, 277
„ instantaneous light		„ „ effect of, in	
apparatus....	2, 57	inducing the com-	
„ Mercaptide....	8, 349	bination of hydrogen	
„ -ore, analysis of, ac-		and oxygen ....	2, 49
cording to Berze-		„ Sulphides ....	6, 286
lius ....	6, 259	„ Sulphocarbonate ....	6, 290
„ -ore, analysis of, ac-		„ surface-action of ....	1, 37
cording to Döbe-		„ Thiocyanide ....	8, 115
reiner and Weiss	6, 266	„ and Barium, alloy ....	6, 327
„ -ore, analysis of, ac-		„ and Bismuth, alloy....	6, 333
cording to Vau-		„ and Cadmium, alloy	6, 335
quelin, Wollaston,		„ and Copper, alloy ....	6, 337
and others....	6, 255	„ Copper, and Zinc,	
„ -ore, quantitative		alloy ....	6, 338
analysis of ....	6, 259	„ and Gold, alloy ....	6, 339
„ -ore, treatment of the		„ and Iridium, alloys....	6, 393
portion of, insoluble		„ and Iron, alloy ....	6, 336
in aqua regia		„ „ carbide ....	6, 336
	6, 262, 265, 268	„ and Lead, alloy ....	6, 335
„ Oxalates ....	9, 170	„ and Molybdenum,	
„ Oxides ....	6, 281	alloy ....	6, 331
„ Oxidized sulphide ....	6, 288	„ and Nickel, alloy ....	6, 337
„ Oxychloride, am-		„ and Palladium, alloy	6, 358
monio-phosphate of		„ and Potassium, alloy	6, 320
	6, 309, 318	„ „ sul-	
„ Oxychloride, am-		phide ....	6, 321
monio-sulphate of		„ and Silver, alloy ....	6, 339
	6, 310, 318	„ and Sodium, alloy ....	6, 323
„ Phosphide ....	6, 286	„ and Tin, alloy ....	6, 335
„ preparation of		„ and Tungsten, alloy	6, 331
	6, 253, 264, 267	„ and Vanadium, alloy	6, 331
„ processes for render-		„ and Zinc, alloy ....	6, 333
ing it malleable ....	6, 271	Platosamine ....	6, 313
„ Protiodide ....	6, 290	„ hydrochlorate, green	6, 304
„ properties ....	6, 273	„ „ red ....	6, 303
„ Protochloride ....	6, 293	„ „ yellow	6, 302
„ „ compounds		„ hydrocyanate ....	8, 45
of, with ethyla-		„ nitrate ....	6, 311
mine ....	9, 61	Platosammonium, cyanide	8, 45
„ Protochloride, com-		Platosopyridine ....	10, 407
pounds of, with me-		Playfair and Joule's experi-	
thylamine....	7, 318	ments on the expan-	
„ Protocyanide ....	10, 506	sion of solid bodies	
„ Protosulphide ....	6, 286	by heat ....	1, 233
„ reactions of	6, 282, 283	„ and Joule's investi-	
„ -resin ....	9, 35	gations on atomic	
„ „ crude....	9, 10	volume and density	1, 83
„ Russian process for		Plinius' Chrysocolla ....	3, 87
coinage of....	6, 272	Plombgomme ....	5, 165
„ -sal-ammoniac ....	6, 307	Plumbagin ....	18, 238



Plumbate of Potash ....	5, 160	Poonalite ....	3, 448
„ Soda ....	5, 162	Poplar-bark, preparation of Sali-	
Plumbethyls ....	9, 106; 13, 510	cin from ....	15, 432
Plumbic Biethyl ....	13, 510	„ -buds, oil of ....	14, 392
Plumbides of Ethyl ....	9, 106	„ -buds, peculiar body from ....	15, 444
Plumbite of Ammonia ....	5, 158	„ -buds, resins of ....	17, 451
„ Baryta ....	5, 163	Poppy-oil ....	16, 312
„ Lime ....	5, 164	„ wax from capsules of blue-	
„ Nickel-oxide ....	5, 394	seeded ....	18, 162
„ Potash ....	5, 160	Populin....	15, 347, 441
„ Soda ....	5, 162	„ conversion of, into Sali-	
Plumbo-calcite ....	5, 164	cin ....	15, 431
„ -chromic Oxalate ....	9, 156	Porcelain clays....	3, 416
<i>Plumbum</i> ....	5, 105	„ Reaumur's ....	3, 384
<i>Plumbum corneum</i> ....	5, 145	„ spar ....	3, 461
Plum-kernels, oil of ....	17, 98	Porla spring, Apocrenic acid in ....	17, 469
Podophyllin ....	17, 451	„ Crenic acid in....	17, 466
Pohl's battery ....	1, 408	Porphyric acid ....	17, 183
Point of saturation ....	1, 39	Porphyrine ....	18, 191
Polar conductors or wires of vol-		Porphyroxine ....	16, 442
taic battery ....	1, 431	Porpoise oil ....	16, 323
Polarity, crystalline, of bismuth		Portugal Laurel oil ....	12, 29
and other bodies ....	1, 517	Potash ....	3, 10
Polarisation, circular, in organic		„ Acetates ....	8, 297
liquids ....	7, 64	„ Aconitates ....	11, 405
„ electrical....	1, 473	„ Aescinate ....	18, 37
„ of light ....	1, 164	„ -albite ....	3, 443
„ rotation of the plane		„ Albuminate ....	18, 303
of, by magnetic or		„ Aloetate ....	12, 11
electric influence	1, 168	„ Alcoholic, action of, on	
Poliene ....	9, 484	chlorine-compounds ....	13, 421
Poling of copper ....	5, 399	„ Alloxanate ....	10, 162
Pollux and Castor ....	3, 448	„ -alum ....	3, 321
<i>Polyanthes tuberosa</i> , emission of		„ -alum with Ammonia-	
light by the flowers of ....	1, 187	alum ....	3, 323
Polyargite ....	3, 448	„ Aluminate ....	3, 320
Polybasic acids, glycerides of ....	13, 580	„ Amylomalate ....	11, 80
„ organic acids....	7, 200	„ Amylophosphate ....	11, 51
„ Phosphate of Ferric		„ Amylosulphate....	11, 56
oxide ....	5, 225	„ Amylosulphite....	11, 53
Polybasite ....	6, 189	„ Amylotartrate....	11, 81
Polychroite, <i>see</i> Crocin.		„ Amyloxalate ....	11, 73
Polychromatic acid ....	12, 1	„ Amyloxanthate ....	11, 61
Polychrome, <i>see</i> Aesculin.		„ Anacardate ....	17, 521
Polygalin, <i>see</i> Senegin.		„ Anchoate ....	13, 375
Polymeric Isomorphism ....	1, 93	„ Angelate ....	10, 415
Polymerism ....	1, 109	„ Anisate ....	13, 126, 584
„ in organic com-		„ Antimoniate ....	4, 376
pounds ....	7, 67	„ Antimoniate, with Sulph-	
Polymignite ....	3, 487	antimoniate of Potas-	
Polyselenide of Calcium ....	3, 203	sium ....	4, 381
Polyspherite ....	5, 150	„ Antimonite ....	4, 375
Polythionic acids ....	2, 168	„ Apocrenate ....	17, 470
<i>Pompholyx</i> ....	5, 10	„ Arabate ....	15, 202
Ponderable substances, undecom-		„ Arachidate ....	17, 371
posed, division of, into metals		„ Argentate ....	6, 178
and metalloids ....	2, 1	„ Arseniates ....	4, 291
<i>Pongamia glabra</i> , oil of the seeds		„ Arsenite ....	4, 291
of ....	17, 98	„ with Asparagine ....	10, 246

Potash, Aspartate ....	10, 234	Potash, Cetylene-sulphate ....	16, 371
„ Aurate....	6, 226	„ Cetyl-xanthate ....	16, 372
„ Aurate with Chloride of Potassium ....	6, 230	„ Chelidonate ....	12, 416
„ Aurite ....	6, 226	„ Chloranilate ....	11, 191
„ Aurosulphite ....	6, 227	„ Chlorate ....	3, 58
„ Azelaate ....	17, 81	„ Chloride ....	2, 301; 3, 57
„ Benzilate ....	12, 183	„ Chlorisatate ....	13, 75
„ Benzoate ....	12, 38	„ Chlorite ....	3, 57
„ Benzoglycolate....	12, 66	„ Chlorobenzoate ....	12, 114
„ Biacetate ....	8, 299	„ Chlorocinnamate ....	13, 296
„ Biacetate, anhydrous ....	8, 337	„ Chlorosalicylite ....	12, 295
„ Bibromisatate ....	13, 71	„ Chlorosulphosomethylate ....	7, 301
„ Bichlorisatate ....	13, 80	„ Cholate ....	18, 49
„ Bichlorosalicylate ....	12, 298	„ Chromates ....	4, 144
„ Bichlorosulphosomethylate ....	7, 303	„ Chromate with cyanide of mercury ....	8, 23
„ Bichromate ....	4, 147	„ Chromate with sulphate of potash ....	4, 150
„ Bichromate with Nitrate of Potash ....	4, 151	„ Chrome-alum ....	4, 148
„ Bichromate with Protochloride of Mercury ....	6, 115	„ Chromite ....	4, 144
„ Biniodate with Chloride of Potassium....	3, 72	„ Chrysammate ....	12, 3
„ Binitrocarbolate ....	11, 207	„ Chrysanilate ....	12, 331
„ Binitrophloretate ....	13, 333	„ Chrysanisate ....	12, 303
„ Binitrosalicylate ....	12, 315	„ Chrysophanate....	16, 175
„ Bismuthate ....	4, 445	„ Cimicate ....	16, 284
„ Bisulphate ....	3, 40	„ Cinnamate ....	13, 274
„ Bisulphate with Biniodate of Potash ....	3, 71	„ Citraconate ....	10, 420
„ Bisulphite ....	3, 38	„ Citrates ....	11, 446
„ Bisulphite, compound of, with Anisylous acid ....	13, 122	„ Cobaltite ....	5, 343
„ Bisulphite, compound of, with Bitter Almond oil ....	12, 27	„ Comenate ....	11, 385
„ Bisulphite, compound of, with Cuminol ....	14, 147	„ Convolvulate ....	16, 157
„ Bisulphite, compound of, with Rue oil ....	14, 492	„ Crenate ....	17, 467
„ Bisulphite, compound of, with Salicylous acid ....	12, 241	„ Croconate ....	10, 390
„ Bisulphohydrokinonate ....	16, 241	„ crude ....	3, 14
„ Bisulphometholate ....	12, 484	„ crystallised ....	3, 14
„ Borates ....	3, 25	„ Cuminate ....	14, 150
„ Bromacetate ....	12, 533	„ with Cupric oxide ....	5, 457
„ Bromate ....	3, 54	„ with Cuprous oxide ....	5, 458
„ Butyrate ....	10, 554	„ Cyanate ....	8, 65
„ Butyrate ....	10, 84	„ Cyanurate ....	9, 452
„ Cacodylate ....	9, 330	„ Dialurate ....	10, 158
„ Camphorate ....	14, 459	„ Diliturate ....	10, 182
„ Caproate ....	11, 416	„ Elaidate ....	17, 77
„ Carbohydrokinovate ....	16, 238	„ Ellagate ....	16, 187
„ Carbolate ....	11, 151	„ Ethionate ....	8, 433
„ Carbonates ....	3, 18	„ Ethylophosphate ....	8, 400
„ Carbonate with fluoride of calcium ....	3, 215	„ Ethylosulphite....	8, 408
„ Carbonate with chloride of potassium ....	3, 71	„ Eugenate ....	14, 205
		„ Euxanthate ....	17, 534
		„ Evernate ....	16, 444
		„ Everninate ....	16, 446
		„ Evernitrate ....	16, 448
		„ -felspar ....	3, 441
		„ Ferrate ....	5, 265
		„ Ferrite....	5, 265
		„ Formiate ....	7, 276
		„ Formiate with cyanide of mercury ....	8, 26
		„ Frémy's Metastannate of	3, 96

Potash, Fulminurate ....	10, 558	Potash, Mannitate ....	15, 382
„ Fumarate ....	10, 26	„ Meconate ....	12, 427
„ Gallate ....	12, 405	„ Mellitate ....	10, 5
„ Gambodate ....	17, 417	„ Metaconate ....	10, 429
„ Gentianates ....	16, 179	„ Metaphosphate ....	3, 30
„ -glass ....	3, 372	„ Metatartrate ....	10, 328
„ Glaucomelanate ....	15, 25	„ Methylsalicylate ....	12, 257
„ with Glucina ....	3, 300	„ Molybdate ....	4, 69
„ Glycerate ....	13, 570	„ Monochloracetate ....	12, 539
„ Glycocholate ....	18, 59	„ Monochromate with pro-	
„ Glyoxylate ....	12, 507	tochloride of mercury ....	6, 115
„ Guaiaretate ....	17, 243	„ Mucate ....	11, 505
„ Gurgunate ....	17, 546	„ Myristate ....	16, 212
„ -harmotome ....	3, 446	„ Myronate ....	15, 346, 418
„ -haayne ....	3, 457	„ Naphthionate ....	14, 112
„ Hemipinate ....	14, 431	„ Narcotinate ....	16, 148
„ Hippurate ....	12, 76	„ Niccolate ....	5, 384
„ Hydrate ....	3, 11	„ Niobiate ....	4, 18
„ Hydrate, electrolysis of	1, 458	„ Nitranisate ....	13, 138, 585
„ Hydriodate ....	3, 50	„ Nitrate ....	3, 68
„ Hydriodite ....	3, 50	„ „ with acid melli-	
„ Hydrochlorate with		tate of potash ....	10, 6
Stannite of Potash ....	5, 98	„ Nitrate with bichro-	
„ Hydropiperate ....	15, 12	mate of potash ....	4, 151
„ Hyoglycocholate ....	18, 104	„ Nitrate with sulpho-	
„ Hyperoxymuriate ....	3, 58	tungstate of potash ....	4, 40
„ Hypobromite ....	3, 54	„ -nitre ....	3, 68
„ Hypochlorate ....	3, 58	„ Nitrite ....	3, 67
„ Hypochlorite ....	3, 57	„ Nitrobenzoate ....	12, 124
„ Hypophosphite ....	3, 27	„ Nitrobichlorocarbolate....	11, 210
„ Hyposulphate ....	3, 39	„ Nitrocinnamate ....	13, 301
„ Hyposulphite ....	3, 36	„ Nitrococussate ....	13, 27
„ Hyposulphite with cya-		„ Nitrohippurate ....	12, 130
nide of mercury ....	8, 19	„ Nitrosalicylate ....	12, 308
„ Hypovanadiate ....	4, 99	„ Nitrosopelargonate ....	13, 372
„ Inosate ....	11, 120	„ Nitrotoluylate ....	13, 22
„ Insolinate ....	13, 320	„ Nitroxybenzoate ....	12, 313
„ Iodate ....	3, 51	„ Cenantate ....	12, 456
„ Iodite ....	3, 50	„ Cenanthylate ....	12, 453
„ with Iridium-oxides ....	6, 383	„ Oleate ....	17, 69
„ Iron-alum ....	5, 270	„ Osmiamate ....	6, 419
„ Isamate ....	13, 110	„ with Osmium-oxides ....	6, 417
„ Isatate ....	13, 55	„ Oxalates ....	9, 125
„ Isatosulphite ....	13, 57	„ Oxamate ....	13, 536
„ Isethionate ....	8, 430	„ Palmitate ....	16, 360
„ Isobiglycolethylenate ....	15, 234	„ Pectate ....	15, 406
„ Isotartrate ....	10, 332	„ Pelargonate ....	13, 370
„ Itaconate ....	10, 426	„ Pelopiate ....	4, 23
„ Jalapinolate ....	16, 402	„ Pentathionate ....	3, 37
„ Kinate ....	16, 227	„ Perchlorate ....	3, 62
„ Kinovate ....	18, 25	„ Periodate ....	3, 53
„ Lactates ....	11, 481	„ Permanganate ....	4, 235
„ Lichenate ....	16, 196	„ Picramate ....	11, 244
„ with Magnesia ? ....	3, 249	„ Picrate ....	11, 220
„ Malate ....	10, 214	„ Piperate ....	15, 9
„ Maleate ....	8, 154	„ Phloretate ....	13, 310
„ Mandelate ....	12, 58	„ Phosphates ....	3, 28
„ Manganate ....	4, 233	„ Phosphite ....	3, 28
„ manganese-alum ....	4, 238	„ Phthalate ....	13, 12



Potash, Platinate	....	6, 320	Potash, Sulphosuccinate	....	10, 130
„ Platinite	....	6, 320	„ Sulphotoluate	....	12, 231
„ Plumbate	....	5, 160	„ Sulphotungstate	with	
„ Plumbite	....	5, 160	Nitrate of Potash	....	4, 40
„ Propionate	9, 405 ;	10, 553	„ Sulphovinate	....	8, 420
„ Purpurate	....	10, 197	„ Sulphoxiarseniate	....	4, 294
„ Pyrogallate	....	11, 401	„ Sylvate	....	17, 320
„ Pyromucate	....	10, 385	„ Tannates	....	15, 464
„ Pyrophosphates	....	3, 29	„ Tantalate	....	4, 9
„ Pyrotartrate	....	11, 81	„ Tartrates	....	10, 275
„ Racemate	....	10, 350	„ Tartrelate	....	10, 334
„ Racemomethylate	....	10, 362	„ Tartromethylate	....	10, 338
„ Racemovinate	....	10, 364	„ Tartrovinat	....	10, 341
„ Rhodiate	....	6, 365	„ Taurochenocholate	....	18, 132
„ Rhodioso-rhodiate	....	6, 365	„ Taurocholate	....	18, 67
„ Rhodizonate	....	10, 401	„ Tellurates	....	4, 417
„ Ricinelaïdate	....	17, 136	„ Tellurite	....	4, 416
„ Roccellate	....	16, 476	„ Terbasic Phosphate	....	3, 28
„ Rubiacate	....	16, 52	„ Terchloracetate	....	9, 212
„ Rubianate	....	16, 40	„ Terchlorosulphosomethyl-		
„ Rutheniate	....	6, 401	ate	....	7, 352
„ Saccharates	....	11, 517	„ Tetrathionate	....	3, 37
„ Salicylate	....	12, 250	„ Titanates	....	3, 484
„ Salicylite	....	12, 240	„ Titanate and Silicate	....	3, 487
„ -salts, general properties			„ Thiacetate	....	13, 448
of	....	3, 16	„ Thionaphthamate	....	14, 116
„ Santalate	....	16, 260	„ Thiotolamate	....	12, 344
„ Sebate	....	14, 497	„ Toluylate	....	13, 9
„ Seleniate	....	3, 45	„ Trithionate	....	3, 37
„ Selenite	....	3, 44	„ Tungstate	....	4, 38
„ Silicates	....	3, 369	„ Tungstate with Fluoride of Tungsten and Potassium	....	4, 46
„ Silicate with silicate of alumina	....	3, 420	„ Tungstate with Sulphotungstate of Potassium	....	4, 46
„ Sinapate	....	14, 521	„ Uranate	....	4, 186
„ solution of	....	3, 14	„ Urate	....	10, 468
„ -soaps	....	17, 70, 108	„ Uroxanate	....	10, 479
„ Stannates	....	5, 95	„ Usnate	....	17, 50
„ Stannite	....	5, 95	„ Valerate	....	11, 31
„ Stearate	....	17, 108	„ Vanadates	....	4, 99
„ Stilbite	....	12, 180	„ Vanadite	....	4, 98
„ Styphnate	....	11, 232	„ Vulpate	....	17, 150
„ Suberate	....	13, 208	„ Xanthate	....	8, 452
„ Succinate	....	10, 116	„ Zincate	....	5, 43
„ Sulphacetate	....	8, 437	„ with Zirconia	....	3, 347
„ Sulphates	....	3, 39	„ and Alumina carbonate	....	3, 321
„ Sulphate with Chloride of Potassium	....	3, 721	„ and Alumina, oxalate	....	9, 135
„ Sulphate with Chromate of Potash	....	4, 150	„ and Alumina, sulphate	....	3, 321
„ Sulphindigotate	....	13, 62	„ and Alumina, tartrate	....	10, 292
„ Sulphite	....	3, 38	„ and Ammonia, citrate	....	11, 446
„ Sulphobenzoate	....	12, 54	„ and Ammonia, oxalate?	9, 126	
„ Sulphocamphorate	....	13, 379	„ and Ammonia, pyrophosphate	....	3, 71
„ Sulphocaprylate	....	13, 197	„ and Ammonia, racemate	10, 350	
„ Sulphocinnamate	....	13, 279	„ and Ammonia, sulphate	3, 71	
„ Sulphomethylate	....	7, 306	„ and Ammonia, tartrate	10, 280	
„ Sulphophoenicate	....	13, 97	„ and Ammonia, tungstate	4, 40	
„ Sulphosalicylate	12, 276, 277				
„ Sulphosomethylate	....	7, 299			

Potash with Antimonic oxide ....	4, 375	Potash and Glucina, sulphate ....	3, 301
„ and Arsenic acid, tartrate	10, 296	„ and Iridious oxide, sulphite ....	6, 384
„ and Arsenious acid, oxalate ....	13, 521	„ and Lanthanum, sulphate ....	3, 279
„ and Arsenious acid, racemate....	10, 356	„ and Lead-oxide, hyposulphite....	5, 160
„ and Arsenious acid, tartrate....	10, 296	„ and Lead-oxide, sulphate	5, 161
„ and Baryta, carbonate ....	3, 164	„ and Lime, chelidonate ....	12, 418
„ and Baryta, nitrate ....	3, 164	„ and Lime, chromate ....	4, 154
„ and Baryta, silicate ....	3, 388	„ and Lime, lactate ....	11, 484
„ and Baryta, tartrate ....	10, 286	„ and Lime, malate ....	10, 219
„ and Bismuth-oxide, bis-muthate ....	4, 445	„ and Lime, phosphate ....	3, 215
„ and Boracic acid, racemate ....	10, 350	„ and Lime, silicate ....	3, 393
„ and Boracic acid, tartrate....	10, 278	„ and Lime, sulphate ....	3, 215
„ and Borax, tartrate ....	10, 283	„ and Lime, tartrate ....	10, 289
„ and Cadmic oxide, sulphate ....	5, 63	„ and Lithia, tartrate ....	10, 285
„ and Caprylic aldehyde, sulphite ....	13, 188	„ and Magnesia, borate ....	3, 249
„ and Ceric oxide, carbonate....	3, 272	„ and Magnesia, carbonate	3, 249
„ and Ceric oxide, sulphate	3, 273	„ and Magnesia, chromate	4, 154
„ and Cerous oxide, carbonate ....	3, 272	„ and Magnesia, hyposulphite....	3, 249
„ and Cerous oxide, sulphate ....	3, 272	„ and Magnesia, succinate	10, 122
„ and Chromic oxide, carbonate ....	4, 147	„ and Magnesia, sulphate	3, 250
„ and Chromic oxide, pyrophosphate ....	4, 147	„ and Magnesia, tartrate....	10, 291
„ and Chromic oxide, sulphate ....	4, 147	„ and Manganic oxide, sulphate....	4, 238
„ and Chromous oxide, sulphate....	4, 147	„ and Manganous oxide, sulphate ....	4, 238
„ and Cobalt-oxide, carbonate ....	5, 343	„ and Mercuric oxide, sulphate ....	6, 99
„ and Cobalt-oxide, sulphate ....	5, 344	„ and Mercurous oxide, hyposulphite....	6, 98
„ and Cupric oxide, carbonate ....	5, 458	„ and Molybdic acid, tartrate....	10, 293
„ and Cupric oxide, seleniate....	5, 460	„ and Molybdic oxide, carbonate ....	4, 70
„ and Cupric oxide, sulphate ....	5, 459	„ and Molybdic oxide, hydrofluatate ....	4, 72
„ and Cuprous oxide, hyposulphite ....	5, 458	„ and Molybdic oxide, sulphate ....	4, 72
„ and Cuprous oxide, sulphite ....	5, 459	„ and Molybdous oxide, hydrochlorate ....	4, 72
„ and Ferric oxide, carbonate ....	5, 268	„ and Molybdous oxide, hydrofluatate ....	4, 72
„ and Ferric oxide, sulphate ....	5, 268	„ and Nickel-oxide, sulphate....	5, 384
„ and Ferrous oxide, sulphate....	5, 268	„ Nickel oxide, and Cupric oxide, sulphate ....	5, 497
„ and Glucina, carbonate	3, 301	„ and Nitric oxide, sulphite....	3, 70
		„ and Osmious oxide, sulphite....	6, 417
		„ and Palladious oxide, nitrite ....	6, 355
		„ and Palladious oxide, sulphate ....	6, 353
		„ and Platinic oxide, nitrate....	6, 323

Potash and Platinic oxide, sulphate....	6, 321	Potash and Uranic oxide, acetate	8, 307
„ and Platinous oxide, sulphate ?	6, 321	„ and Uranic oxide, carbonate ....	4, 187
„ and Platinous oxide, sulphite....	6, 321	„ and Uranic oxide, sulphate ....	4, 188
„ and Quinidine, tartrate	17, 302	„ and Uranoso-uranic oxide, sulphate....	4, 188
„ and Quinine, tartrate....	17, 291	„ and Uranous oxide, sulphate ....	4, 187
„ and Rhodic oxide, sulphate ....	6, 368	„ and Vanadic acid, sulphate ....	4, 100
„ and Ruthenious oxide, sulphite ....	6, 402	„ and Vanadic oxide, carbonate ....	4, 100
„ and Silica, carbonate ....	3, 373	„ and Vanadic oxide, sulphate ....	4, 100
„ and Silver-oxide, carbonate ....	6, 178	„ and Yttria, carbonate ....	3, 290
„ and Silver-oxide, hypsulphite ....	6, 178	„ and Yttria, oxalate ....	9, 135
„ and Silver-oxide, nitrate	6, 179	„ and Yttria, sulphate ....	3, 290
„ and Silver-oxide, sulphate ....	6, 178	„ and Zinc-oxide, carbonate ....	5, 43
„ and Silver-oxide, sulphite....	6, 178	„ and Zinc-oxide, chromate....	5, 48
„ and Soda, action of, on organic compounds ...	13, 385	„ and Zinc-oxide, molybdate ....	5, 48
„ and Soda, antitartrate	10, 367	„ and Zinc-oxide, silicate	5, 47
„ and Soda, arseniate ....	4, 299	„ and Zinc-oxide, sulphate	5, 43
„ and Soda, carbonate ....	3, 119	„ Zinc-oxide, and Cupric oxide, sulphate ....	5, 481
„ and Soda, chromate ....	4, 152	„ and Zirconia, carbonate	3, 347
„ and Soda, insolinate ....	13, 320	„ and Zirconia, silicate ....	3, 463
„ and Soda, maleate ? ....	8, 155	„ and Zirconia, sulphate	3, 347
„ and Soda, metatartrate	10, 328	Potassio-antimonic Antitartrate	10, 368
„ and Soda, nitrate ....	3, 120	„ -antimonic Citrate ....	11, 453
„ and Soda, oxalate ? ....	9, 127	„ -antimonic Oxalate	9, 149; 13, 523
„ and Soda, phosphate ....	3, 119	„ -antimonic Racemate ....	10, 356
„ and Soda, pyrophosphate	3, 120	„ -antimonic Tartrate ....	10, 299
„ and Soda, racemate ....	10, 351	„ -bismuthic Tartrate ....	10, 310
„ and Soda, sulphate ....	3, 120	„ -cerous Oxalate ....	9, 134
„ and Soda, sulphochromate....	4, 152	„ -chromic Mucate ....	11, 507
„ and Soda, sulphosalicylate ....	12, 278	„ -chromic Oxalate ....	9, 138
„ and Soda, tartrate ....	10, 282	„ -chromic Tartrates ....	10, 294
„ Soda, and Boracic acid, racemate ....	10, 352	„ -cobaltoso-cobaltic Oxalate ....	9, 163
„ and Strontia, silicate ....	3, 388	„ -cobaltous Oxalate ....	10, 534
„ and Strontia, tartrate....	10, 287	„ -cobaltous Oxalate, basic	9, 163
„ and Tantallic acid, sulphate ....	4, 9	„ -cupric Ferrocyanide ....	12, 498
„ and Thorina, carbonate	3, 335	„ -cupric Oxalate	9, 166; 10, 535
„ and Thorina, nitrate ....	3, 336	„ -cupric Racemate ....	10, 359
„ and Thorina, oxalate ....	9, 136	„ -cupric Tartrate ....	10, 321
„ and Thorina, sulphate....	3, 335	„ -cuprous Ferrocyanide....	12, 497
„ and Thorina, tartrate....	10, 292	„ -ferric Oxalate....	9, 158
„ and Titanic oxide, carbonate ....	3, 485	„ -ferric Racemate ....	10, 358
„ and Titanic oxide, sulphate ....	3, 485	„ -ferric Tartrate ....	10, 316
„ and Tungstous oxide, tungstate ....	4, 45	„ -ferrous Oxalate ....	13, 527
		„ -ferrous Tartrate ....	10, 316
		„ -manganic oxalate	9, 147; 13, 521



Potassio-manganous Oxalate		hyposulphate of	
9, 147; 13, 521		Iridious oxide ....	6, 389
„ -manganous Tartrate ....	10, 296	Potassium, Chloride, chromate of	4, 150
„ -mercuric Oxalate ?		„ Chloride, sulphate of	3, 63
9, 169; 13, 328		„ Chloride with Cyanide of Mercury ....	8, 20
„ -mercurous and Potassio-		„ Chloride and Sulphate of Potash,	
mercuric Tartrates ....	10, 324	with Chloro-hyp-	
„ -molybdic Tartrate ....	10, 293	sulphate of Iridious	
„ -molybdous Tartrate ....	10, 293	oxide ....	3, 390
„ -plumbic Oxalate ....	9, 156	„ Chloride with Ethyl-	
„ -silver Oxalate....	9, 169	chloride of Plati-	
„ -stannous Oxalate		num ....	8, 391
9, 154; 10, 534		„ Chloride with Sul-	
„ -stannous Tartrate ....	10, 311	phite of Iridious	
„ -tantallic Tartrate ....	10, 292	oxide ....	6, 388
„ -telluric Tartrate ....	10, 309	„ Chloride with Sul-	
„ -uranic Oxalate ....	9, 145	phate of potash ....	3, 71
„ -uranous Oxalate ....	9, 145	„ Chloriridiate ....	6, 386
„ -uranous Tartrate ....	10, 296	„ Chlorisatide ....	13, 74
„ -vanadic Tartrate ....	10, 293	„ Chloroaurate ....	6, 229
Potassium ....	3, 3	„ Chloroaurite ....	6, 229
„ action of, on organic		„ Chloroiodite ....	3, 64
compounds ....	7, 145	„ Chloropalladiate ....	6, 354
„ alloys of ....	3, 72	„ Chloropalladite ....	6, 354
„ amalgam of ....	6, 97	„ Chloroplatinate ....	6, 322
„ Amide ....	3, 67	„ Chloroplatinite ....	6, 322
„ Antimonide....	4, 374	„ Chlororhodate ....	6, 366
„ Argentocyanide ....	8, 29	„ Chlorosmate ....	6, 418
„ arseniate of Iodide		„ Chlorostannate ....	5, 97
of ....	4, 294	„ Chlorostannite ....	5, 97
„ Arsenide ....	4, 290	„ Chlorotellurate ....	4, 420
„ Auridecyanide ....	8, 41	„ Chromidecyanide ....	7, 420
„ Aurocyanide ....	8, 38	„ Cobaltidecyanide ....	7, 494
„ Aurosulphide ....	6, 227	„ Cuprocyanide ....	8, 4
„ Bismuthide....	4, 445	„ Cuprosoferrocyanide	13, 409
„ Boride ....	3, 25	„ Cyanide ....	7, 411
„ Boro-nitride ....	3, 70	„ -ethyl ....	13, 491
„ Bromide ....	3, 53	„ Ferriocyanide or Fer-	
„ Bromide with Cya-		ridecyanide....	7, 468
nide of mercury ....	8, 20	„ Ferrocyanide 7, 453; 13, 408	
„ Bromo-aurate ....	6, 228	„ Ferrocyanide, decom-	
„ Bromopalladite ....	6, 353	position of, by strong	
„ Bromoplatinate ....	6, 322	sulphuric acid ....	12, 495
„ Bromotellurate ....	4, 420	„ Ferrocyanide with Cy-	
„ Carbide ....	3, 17	anide of Mercury ....	8, 25
„ Carboxide ....	10, 395	„ Fluoboride ....	3, 65
„ Chloride ....	3, 56	„ Fluopalladite ....	6, 354
„ Chloride with Au-		„ Fluoplatinate ....	6, 323
rate of Potash ....	6, 230	„ Fluoride ....	3, 64
„ Chloride with Bi-		„ Fluoride with Ses-	
cyanide of Platinum	8, 51	quifluoride of Chro-	
„ Chloride with Bi-		mium ....	4, 151
niodate of Potash....	3, 72	„ formation of organic	
„ Chloride with Bi-		compounds in the	
sulphite of Osmious		preparation of, from	
oxide ....	6, 419	charcoal and carbo-	
„ Chloride with Car-		onate of potash ....	7, 41
bonate of Potash ....	3, 71		
„ Chloride with Chloro-			

Potassium, humous substance formed in the preparation of, by heating carbonate of potash with charcoal .... 17, 461	Potassium, Sulpharseniate .... 4, 293
„ Hydride .... 3, 17	„ Sulpharsenite .... 4, 293
„ Hydrothiosulphocyanide .... 8, 100	„ Sulpharsenite with excess of acid .... 4, 293
„ Hyposulpharsenite .... 4, 292	„ Sulphides .... 3, 30
„ Iodide .... 3, 45	„ Sulphide with Mustard-oil .... 10, 49
„ Iodide with Cyanide of Mercury .... 8, 19	„ Sulphocyanide .... 8, 78
„ Iodo-aurate.... 6, 228	„ Sulphocyanide with Cyanide of Mercury 8, 96
„ Iodomercurate .... 16, 433	„ Sulphomolybdate .... 4, 70
„ Iodopalladite .... 6, 353	„ Sulphomolybdate with Nitre .... 4, 73
„ Iodoplatinate .... 6, 321	„ Sulphophosphide .... 3, 43
„ Iodostannite .... 5, 97	„ Sulphorhodate .... 6, 365
„ Iodotellurate .... 4, 420	„ Sulphosinapate .... 10, 34
„ Iridiocyanide .... 8, 60	„ Sulphotellurite .... 4, 420
„ Isatide .... 13, 53	„ Sulphotungstate .... 4, 40
„ literature and history of .... 3, 3	„ Sulphotungstate with Tungstate of Potash 4, 46
„ Manganidecyanide .... 7, 421	„ Sulphovanadate .... 4, 100
„ Manganocyanide .... 7, 421	„ Sulphovanadite .... 4, 100
„ Mellonide .... 9, 388; 10, 346	„ Sulphydrate .... 3, 31
„ Mercaptide .... 8, 344	„ Tellurides .... 4, 416
„ -nickel Oxalate 9, 164; 10, 534	„ Tellurocyanide? .... 8, 125
„ Nitride .... 3, 66	„ Thiocyanide .... 8, 114
„ Nitroprusside .... 8, 130	„ and Aluminum, chloride .... 3, 323
„ olive-coloured compound of .... 3, 67	„ and Aluminum, fluoride .... 3, 324
„ Oxides .... 3, 9	„ and Ammonium, ferrocyanide 10, 503; 12, 496
„ Oxyxanthate .... 8, 461	„ and Antimony, arsenide .... 4, 392
„ Palladiocyanide .... 8, 59	„ and Antimony, chloride .... 4, 381
„ Perbromide.... 3, 54	„ and Barium, ferricyanide .... 7, 481
„ Peroxide .... 3, 16	„ and Barium, ferrocyanide .... 7, 481
„ Phosphide .... 3, 26	„ and Barium, sulphide 3, 164
„ Platinidecyanide .... 8, 49	„ and Bismuth, chloride 4, 447
„ Platinocyanide 8, 47; 10, 507	„ and Bismuth, iodide 4, 447
„ Platino-platinidecyanide 8, 48	„ and Bismuth, oxalate 13, 524
„ Platinosescquicyanide 12, 499	„ and Cadmium, bromide .... 5, 64
„ properties .... 3, 9	„ and Cadmium, chloride .... 5, 64
„ Protoxide .... 3, 10	„ and Cadmium, cyanide .... 7, 426
„ -salt of Pseudosulphocyanogen .... 8, 112	„ and Cadmium, iodide 5, 64
„ -salts, solubility of, in alcohol .... 8, 265	„ and Cadmium, oxalate 13, 526
„ Selenide .... 3, 43	„ and Calcium, ferrocyanide .... 7, 484
„ Selenocyanide .... 8, 122	„ and Carbon, sulphide 3, 42
„ Silicide .... 3, 369	„ and Chromium, sulphide .... 4, 147
„ Silico-fluoride .... 3, 374	„ and Cobalt, fluoride 5, 344
„ sources and preparation .... 3, 4	
„ Suboxide .... 3, 9	
„ Sulphantimoniate .... 4, 380	
„ Sulphantimoniate with Antimoniate of Potash .... 4, 381	
„ Sulphantimonite .... 4, 378	

Potassium and Cobalt, racemate	10, 358	Potassium and Magnesium, hy-	
„ and Copper, alloy ....	5, 456	drated chloride ....	3, 250
„ and Copper, antimo-		„ and Manganese, fer-	
nide ....	5, 476	rocyanide ....	7, 188
„ and Copper, dichlo-		„ and Manganese, fluo-	
ride ....	5, 460	ride ....	4, 238
„ and Copper, diiodide	5, 460	„ and Manganese, sul-	
„ and Copper, ferrocya-		phide ....	4, 237
nide ....	8, 10	„ and Mercury, bromide	6, 101
„ and Copper, fluoride	5, 461	„ and Mercury, cyanide	8, 18
„ and Copper, fulminate	9, 300	„ and Mercury, iodide	6, 99
„ and Iridium, proto-		„ and Mercury, sulphide	
chloride ....	6, 385	(hydrated) ....	6, 98
„ and Iridium, sesqui-		„ and Mercury, sulpho-	
chloride ....	6, 385	cyanide ....	8, 95
„ and Iridium, sulphide	6, 384	„ and Nickel, cyanide....	7, 498
„ and Iridium, terchlo-		„ and Nickel, fluoride	5, 385
rine ? ....	6, 387	„ and Osmium, bichlo-	
„ and Iron, alloy ....	5, 264	ride ....	6, 418
„ and Iron, antimonide	5, 312	„ and Osmium, proto-	
„ and Iron, bismuthide	5, 312	chloride ....	6, 418
„ and Iron, boride ....	5, 268	„ and Osmium, sesqui-	
„ and Iron, ferricyanide	7, 477	chloride ? ....	6, 418
„ and Iron, ferrocya-		„ and Palladium, melli-	
nide ....	7, 474	tate ....	10, 13
„ and Iron, protochlo-		„ and Platinum, alloy	6, 320
ride ....	5, 271	„ and Platinum, sul-	
„ and Iron, protofluoride	5, 271	phide ....	6, 321
„ and Copper, protoch-		„ Ruthenium, sesqui-	
loride ....	5, 460	chloride ....	6, 403
„ and Copper, salicylate	12, 254	„ and Silicium, fluoride	3, 374
„ and Copper, sulphide	5, 458	„ and Silicium, nitride	3, 375
„ and Copper, styph-		„ and Silicium, sulphide	3, 373
nate ....	11, 235	„ and Silver, alloy ....	6, 177
„ Copper, and Mercury,		„ and Silver, chloride	6, 179
chloride ....	6, 131	„ and Silver, cyanurate	9, 458
„ and Glucinum, fluoride	3, 302	„ and Silver, iodide ....	6, 178
„ and Gold, alloy ....	6, 226	„ and Silver, mellitate	10, 12
„ and Gold, sulphide....	6, 227	„ and Silver, sulphide	6, 178
„ and Hydrogen, fluo-		„ and Silver, sulphocya-	
ride ....	3, 65	nide ....	8, 97
„ and Hydrogen, sul-		„ Silver, and Antimony,	
phide ....	3, 31	alloys ....	6, 192
„ and Iodine, chloride	3, 63	„ and Sodium, alloys....	3, 119
„ and Iridium, bichlo-		„ and Sodium, amalgam	6, 105
ride ....	6, 386	„ and Sodium, ferricya-	
„ and Iron, sesquichlo-		nide ....	7, 479
ride ....	5, 271	„ and Sodium, ferrocya-	
„ and Iron, sesquifluo-		nide ...	10, 503
ride ....	5, 271	„ and Sodium, sulphar-	
„ and Iron, sulphide ....	5, 268	seniate ....	4, 299
„ and Lead, alloy ....	5, 160	„ and Tantalum, fluo-	
„ and Lead, arsenide....	5, 174	ride ....	4, 10
„ and Lead, bromide....	5, 162	„ and Thorinum, bro-	
„ and Lead, tartrate....	10, 313	mide ....	3, 336
„ and Magnesium, fer-		„ and Thorinum, chlo-	
rocyanide ....	7, 486	ride ....	3, 336
„ and Magnesium, hy-		„ and Thorinum, fluo-	
drated bromide ....	3, 250	ride ....	3, 336



- Potassium and Tin, alloy .... 5, 95  
 „ and Titanium, fluoride 3, 485  
 „ and Uranous oxide, chloride .... 4, 188  
 „ and Hydrated Uranous oxide, chloride 4, 189  
 „ and Vanadium, fluoride .... 4, 100  
 „ and Yttrium, chloride 3, 290  
 „ and Yttrium, fluoride 3, 290  
 „ and Zinc, alloy ... 5, 42  
 „ and Zinc, chloride ... 5, 44  
 „ and Zinc, cyanide ... 7, 424  
 „ and Zinc, fluoride ... 5, 44  
 „ and Zinc, iodide ... 5, 44  
 „ and Zinc, lactate ... 11, 488  
 „ and Zinc, tartrate ... 10, 311  
 „ and Zirconium, fluoride .... 3, 348  
 Potato fat .... 6, 398  
 „ fusel-oil .... 11, 9  
 Potatoes, preparation of Inulin from ... 15, 112  
 Potato-shoots, preparation of Solanine from ... 18, 91  
 „ -starch .... 15, 76  
*Potentilla Tormentilla*, Kinovic acid in the root of .... 18, 24  
 Pourprite .... 14, 480  
 Powder, detonating .... 3, 70  
 „ of fusion .... 3, 69  
 Praseolite .... 3, 433  
 Precipitate, white, fusible .... 6, 87  
 „ infusible .... 6, 85  
 Precipitates, varieties of .... 1, 135  
 Precipitation, amorphous bodies produced by .... 1, 103  
 „ forced .... 1, 135  
 „ resulting from decomposition .... 1, 135  
 „ spontaneous 1, 113, 135  
 „ of a thin layer of one metal on the surface of another 1, 497  
 Predisposing affinity, decomposition by .... 1, 124  
 Preservation of vegetable and animal substances .... 7, 100  
 Pressure, atmospheric .... 1, 260  
 „ effect of, on the absorption of gases, by water .... 2, 67  
 „ effect of, on the boiling point of a liquid 1, 275  
 „ influence of, on decomposition .... 1, 111  
 Prehnite .... 3, 428  
 Priestley, his discoveries in pneumatic chemistry .... 1, 5  
 Primary nuclei .... 7, 18, 23, 153  
 Primitive forms of crystals .... 1, 19  
 Prismatic Saltpetre .... 3, 68  
 Prismatoidal Bismuth-glance .... 4, 450  
 „ Copper-glance .... 5, 488  
 Products of decomposition .... 1, 111  
 „ decomposition, quantity of, in the voltaic circuit .... 1, 479  
 Prometallides .... 7, 25  
*Prone* .... 11, 411  
 Propæscinic acid .... 18, 38  
 Prophetin .... 16, 347; 17, 365  
 Propionamide .... 9, 432  
 Propionate of Ammonia .... 9, 405  
 „ Baryta 9, 405; 10, 554  
 „ Copper 9, 407; 10, 554  
 „ Ethyl 9, 409; 10, 556  
 „ Lead .... 10, 555  
 „ Lime 9, 406; 10, 555  
 „ Magnesia .... 10, 555  
 „ Potash 9, 405; 10, 553  
 „ Silver 9, 407; 10, 555  
 „ Soda 9, 405; 10, 553  
 „ Zinc .... 10, 555  
 Propione .... 9, 409; 10, 552  
 Propionic acid 9, 402; 10, 552; 13, 558  
 „ Aldide .... 9, 400  
 „ Ether .... 9, 409  
 Propolin .... 13, 162  
 Proportions in which bodies combine .... 1, 39—64  
 Propyl Arsenide .... 9, 413  
 „ from Boghead cannel coal 13, 386  
 Propylal .... 10, 551  
 Propylamine .... 9, 411  
 Propylene .... 9, 395; 10, 549  
 „ Biacetate .... 13, 555  
 „ Bromide 9, 397; 13, 552  
 „ Chloride .... 9, 398  
 „ formation of, by the action of Biniodide of Phosphorus on Glycerin .... 9, 489  
 „ formation of Propylic Alcohol from .... 10, 550  
 „ Hydrate .... 13, 554  
 „ Iodide .... 9, 397  
 Propyl Hydrate .... 9, 398  
 Propylenyl, *see* Allyl.  
 Propylia .... 13, 485  
 Propylic Alcohol .... 9, 398  
 „ Alcohol, formation of, from Propylene .... 10, 550  
 „ Aldehyde .... 9, 400  
 „ Glycol .... 13, 554  
 Propyloxanthic acid .... 9, 399  
 Protagon .... 18, 374

Protagon, preparation of Neu- rine from ....	18, 379	Protein-chlorous acid	18, 265, 350
Proteides, coloration of blowpipe flame by ....	18, 257	Protein-compounds as ferments	7, 97
„ decomposition of, by heating with strong nitric and hydro- chloric acids ....	18, 258	Protein-oxide ....	18, 263
„ decomposition of, by prolonged boiling with water ....	18, 257	Protein-oxides ....	18, 257
„ fermentation and pu- trefaction of ....	7, 97	„ -substances, deriva- tives of, according to Mulder ....	18, 263
„ formation of Urea by oxidation of ....	13, 402	„ -sulphuric acid ....	18, 257
„ general observations on....	18, 252—262	Protiodide of Calcium ....	3, 205
„ Mulder's deriva- tives of ....	18, 263	„ Gold ....	6, 211
„ oxidation of, by Bi- noxide of Mangan- ese, or Bichromate of Potash and Sul- phuric acid ....	18, 260	„ Iron ....	5, 247
„ properties and com- position of ....	18, 255	„ Manganese ....	4, 226
„ reaction of, with Iodine and Bicar- bonate of Potash ....	18, 262	„ Mercury ....	6, 36
„ reaction of, with Mer- cury and Nitric acid (Millon's solution)	18, 262	„ Platinum ....	6, 290
„ reaction of, with Oil of Vitriol and Sugar	18, 263	„ Tellurium ....	4, 403
„ reaction of, with Po- tassio-cupric Tar- trate ....	18, 262	„ Tin ....	5, 82
„ reactions of, with Gastric Juice, Dias- tase, and Pigments	18, 263	Protic acid ....	18, 335
„ reactions of, with neutral salts ....	18, 261	Proto-arsenide of Iron with Bi- sulphide of Iron ....	5, 309
„ reactions of, with the Nitrates of Mercury	18, 262	„ -arsenide of Nickel with Bisulphide of Nickel ....	5, 391
„ reactions of, with Potash ....	18, 262	Protobromide of Carbon ....	7, 341
„ reaction of, with Su- gar and Oil of Vitriol ....	18, 262	„ Copper ....	5, 436
„ solubility of, in Gas- tric Juice....	18, 263	„ Iron ....	5, 250
„ of the Vegetable Kingdom, generali- ties respecting ....	18, 424	„ Mercury ....	6, 42
Protein, decomposition of, by boiling with dilute Sulphuric or Hydro- chloric acid ....	18, 257	„ Tellurium ....	4, 410
„ Mulder's, from horn	18, 350	„ Tin ....	5, 84
		Protocatechuic acid ....	18, 238
		Protochloride of Carbon ....	9, 215
		„ Carbon, sul- phite of ....	2, 339
		„ Copper ....	5, 438
		„ Copper and Am- monium ....	5, 454
		„ Copper and Po- tassium ....	5, 460
		„ Gold ....	6, 215
		„ Iodine ....	2, 346
		„ Iridium ....	6, 378
		„ Iridium and Ammonium....	6, 362
		„ Iridium and Potassium ....	6, 385
		„ Iridium and Sodium ? ....	6, 390
		„ Iron ....	5, 251
		„ Iron and Am- monium ....	5, 263
		„ Iron and Potas- sium ....	5, 271
		„ Mercury ....	6, 53
		„ Mercury and Ammonium....	6, 89
		„ Mercury with Bichromate of Ammonia	6, 115
		„ Mercury with Bichromate of Potash ....	6, 115

Protochloride of Mercury, compound of Urea with ....	7, 373	Protosulphide of Iron ....	5, 228
„ Mercury with Monochrome of Potash ....	6, 115	„ Mercury ....	6, 19
„ Mercury with Selenocyanide of Mercury....	8, 124	„ Methyl ....	7, 283
„ Osmium and Ammonium....	6, 416	„ Nickel ....	5, 370
„ Osmium and Mercury ....	6, 422	„ Phosphorus ....	2, 212
„ Osmium and Potassium ....	6, 418	„ Platinum ....	6, 286
„ Palladium ....	6, 349	„ Rhodium ....	6, 362
„ Phosphorus ....	2, 328	„ Lead ....	5, 132
„ Osmium ....	6, 412	„ Tin ....	5, 78
„ Platinum ....	6, 293	Protosulphides, metallic, hydrated ....	2, 225
„ Platinum, compounds of, with Methylamine ....	7, 318	Protoxide of Cadmium ....	5, 54
„ Rhodium ....	6, 363	„ Chlorine ....	2, 304
„ Ruthenium ....	6, 400	„ of Cobalt ....	5, 322
„ Silver ....	6, 162	„ Cobalt with Protoxide of Manganese	5, 347
„ Sulphur ....	2, 333	„ Copper ....	5, 406
„ Sulphur, carbonate of ....	2, 339	„ Gold ....	6, 205
„ Tellurium ....	4, 411	„ Iridium ....	6, 371
„ Tin ....	5, 84	„ Iridium with Potash ....	6, 383
Protocyanide of Copper ....	8, 3	„ Iridium with Sesquioxide of Chromium and Iron ...	6, 425
„ Gold ....	8, 34	„ Iron ....	5, 187
„ Iron 7, 430; 13, 407		„ Mercury ....	6, 8
„ Palladium ....	8, 59	„ Nickel ....	5, 362
„ Platinum ....	10, 506	„ Nitrogen ....	2, 373
Protofluoride of Copper ....	5, 443	„ Osmium ....	6, 406
„ Iron ....	5, 256	„ Osmium with Potash	6, 417
„ Iron and Potassium ....	5, 271	„ Palladium ....	6, 342
„ Iron and Silicon ....	5, 288	„ Potassium ....	3, 10
„ of Mercury ....	6, 66	„ Rhodium ...	6, 359
„ Tin, hydrated....	5, 92	„ Silver ....	6, 139
Protogenides ....	7, 24	„ Sodium ....	3, 74
Protonitrate ammoniaco-mercuriel ....	6, 93, 96	„ Tin ....	5, 68
Protonitrobenzoene ....	12, 300	Prout....	1, 6
Protophosphide of Hydrogen ....	2, 135	<i>Prunus domestica</i> , oil from the kernels of ....	17, 98
Protoselenide of Copper ....	5, 432	Prussian Blue, A (ferrous ferri-cyanide) ....	7, 435
„ Silver....	6, 155	„ „ with aqueous oxalic acid ....	9, 172
Protosulphate of Iron ....	5, 237	„ „ B (ferric ferrocyanides; ordinary Prussian blue)....	7, 437
Protosulphide of Cacodyl ....	9, 332	„ „ effect of sunshine on the colour of ....	7, 95
„ Cerium ....	3, 267	„ „ ordinary, compound of, with ammonia ....	7, 445
„ Cobalt ....	5, 331	„ „ ordinary, decomposition of ....	7, 442
„ Copper ....	5, 422	„ „ ordinary, preparation of, on the large scale	7, 441
„ Gold ....	6, 210	„ „ solution of, in	
„ Iridium ....	6, 376		



	aqueous oxalic acid ....	7, 446	Purreic acid, <i>see</i> Euxanthic acid.	
Prussian green	....	7, 446	Pus, formation of pyocyanin from ....	18, 415
Prussiate of Potash, red	....	7, 468	Putrefaction ....	7, 104
„ Potash, yellow	....	7, 453	„ of organic substances, formation of marsh-gas by ....	7, 251
Prussiates	....	7, 404	Putrefying animals, phosphorescence of ....	1, 189
Prussic acid, <i>see</i> Hydrocyanic acid.			„ plants, phosphorescence of ....	1, 191
Prusside of Iron	....	7, 429	Pycnite....	3, 420
Psaturöse	....	6, 190	Pyocyanin	18, 415
Pseudalkannin, <i>see</i> Alkanet-red.			Pyoxanthose	18, 416
Pseudoacetic acid	....	9, 414	Pyrarine	18, 206
Pseudocurarine	....	17, 596	Pyrene	16, 248
Pseudoerythrin	....	12, 373	Pyrethrine	18, 206
Pseudomalachite	....	5, 418	Pyridine	10, 406
Pseudomorphine	....	16, 441	Pyrites, arsenical	5, 304
Pseudomorphous Brown Iron-ore	....	5, 197	„ magnetic	5, 230
Pseudo-orcein	....	12, 385	„ tesserai	5, 349
Pseudopapaverine	....	18, 204	Pyroacetic ether	9, 1
Pseudoquinone	....	17, 229	„ oil	9, 25
Pseudosulphocyanogen	....	8, 108	„ spirit	9, 1
Psilomelane	....	4, 203	Pyro-acids	7, 81
Psychrometer	....	1, 274	Pyrobenzoline	12, 204
Pteleyl, chloride of	....	9, 19	Pyrocamporium	14, 258
„ iodide of	....	9, 19	Pyrocatechin	11, 379
<i>Pteris Aquilina</i> , alkaloïd obtained from	....	10, 410	„ occurrence of, in crude wood-vinegar	15, 150
Pteritannic acid	....	15, 500	Pyrochlore	4, 14
<i>Pterocarpus Draco</i> , resin of	....	17, 387	Pyrocitric acid	10, 417
Ptyalin	....	18, 345, 347	Pyrodextrin	15, 191
Puccine	....	17, 162	Pyrogallate of Lead	11, 401
Puce Lead	....	5, 120	Pyrogallates, metallic	11, 401
<i>Pulegium micranthum</i> , volatile oil of	....	14, 352	Pyrogallic acid	11, 398
Pulsating action exhibited by iron immersed in nitric acid	....	1, 359	„ acid, absorption of oxygen by alkaline solutions of	11, 399
Pulse, aqueous extract of	....	18, 431	Pyroguaiacate of Lead	12, 352
Pulverised bodies rendered phosphorescent by pressure	....	1, 204	Pyroguaiacic acid	12, 350; 17, 252
Pumice-stone, effect of, in inducing the combination of hydrogen and oxygen	....	2, 53	Pyroguaiacin	12, 349; 17, 166
Purification of crystallisable substances	....	1, 14	<i>Pyrola umbellata</i> , bitter principle of	18, 220
Purple of Cassius	....	6, 239	Pyroligneous acid	7, 258; 15, 149
„ Copper	....	5, 489	Pyrolivilic acid	14, 206
„ oxide of Gold	....	6, 206	Pyrolusite	4, 205
„ snail ( <i>Murex</i> ), colouring matter of	....	18, 24	Pyromaric acid	17, 325
<i>Purpura mineralis Cassii</i>	....	6, 239	Pyromeconates, metallic	10, 441
Purpurate of Ammonia	....	10, 192	Pyromeconic acid	10, 438
„ Nicotine	....	14, 232	Pyromellitic acid	10, 14
Purpuric acid	....	10, 191	Pyrometers	1, 235, 237
„ yellow acid formed by decomposition of	....	10, 202	Pyromorphite	5, 149, 174
Purpurin	....	13, 325	Pyromucamide	10, 405
Purree	....	17, 530, 534	Pyromucate of Ethyl	10, 386
			Pyromucates, metallic	10, 385
			Pyromucic acid	10, 383
			„ ether	10, 386
			Pyrophorus from alum	3, 322

Pyrophosphate of Alumina ....	3, 311	Pyroricinic acid ....	17, 142
„ Alumina and Soda ....	3, 325	Pyrosklerite ....	3, 421
„ Ammonia ....	2, 441	Pyrosmalite ....	5, 279
„ Aniline ....	11, 257	<i>Pyrosoma atlanticum</i> , phospho-	
„ Antimonic oxide ....	4, 337	rescence of ....	1, 185
„ Bismuth-oxide ....	4, 434	Pyrotartaric acid ....	11, 83
„ Cadmic oxide ....	5, 56	„ acid, anhydrous ....	11, 101
„ Chromic oxide ....	4, 123	Pyrotartanil ....	11, 326
„ Chromic oxide and Potash ....	4, 147	Pyrotartanilic acid ....	11, 328
„ Cobalt-oxide ....	5, 331	Pyrotartanonitril ....	11, 327
„ Cupric oxide ....	5, 419	Pyrotartanonitrilic acid ....	11, 328
„ Ferric oxide ....	5, 227	Pyrotartranil ....	11, 326
„ Ferric oxide and Soda ....	5, 272	Pyrotartrate of Alumina ....	11, 92
„ Ferrous oxide ....	5, 225	„ Ammonia ....	11, 87
„ Ferrous oxide and Soda ....	5, 272	„ Baryta ....	11, 90
„ Furfurine ....	10, 379	„ Bismuth ....	11, 93
„ Lead-oxide ....	5, 131	„ Cadmium ....	11, 94
„ Lime ....	3, 196	„ Cobalt ....	11, 97
„ Magnesia ....	3, 234	„ Cupric ....	11, 97
„ Magnesia and Soda ....	3, 252	„ Ethyl ....	11, 100
„ Manganous oxide ....	4, 217	„ Ferric ....	11, 96
„ Manganous oxide, Soda, and Ammonia ....	4, 240	„ Ferrous ....	11, 95
„ Mercurous oxide ....	6, 17	„ of Glucina ....	11, 92
„ Nickel-oxide ....	5, 369	„ Lead ....	11, 94
„ Potash ....	3, 29	„ Lime ....	11, 91
„ Potash and Ammonia ....	3, 71	„ Magnesia ....	11, 91
„ of Quinine ....	17, 276	„ Manganese ....	11, 93
„ Silver-oxide ....	6, 149	„ Mercuric ....	11, 98
„ Soda ....	3, 93	„ Mercurous ....	11, 98
„ Soda and Ammonia ....	3, 118	„ of Methyl ....	11, 100
„ Soda and Baryta ....	3, 164	„ Morphine ....	16, 436
„ Soda and Potash ....	3, 120	„ Nickel ....	11, 97
„ Strontia ....	3, 172	„ Potash ....	11, 88
„ Uranic oxide and Soda ....	4, 190	„ Silver ....	11, 99
„ Zinc-oxide ....	5, 18	„ Soda ....	11, 89
„ Zinc-oxide and Ammonia ....	5, 37	„ Strontia ....	11, 90
Pyrophosphates ....	2, 133	„ Uranium ....	11, 92
Pyrophosphoric acid ....	2, 126	„ Zinc ....	11, 93
Pyrophyllite ....	3, 448	Pyrotartronitril ....	11, 327
Pyropissite ....	17, 443	Pyrotartryl and Phenyl, nitride of ....	11, 326
Pyroracemic acid ....	9, 424	Pyroterebolic acid ....	11, 422
Pyroretin ....	17, 440	Pyroxam ....	15, 106
		Pyroxanthin ? ....	14, 163
		Pyroxanthogen ....	14, 164
		Pyroxylic spirit ....	7, 258
		Pyroxylin ....	15, 168
		„ composition of ....	15, 173
		„ decomposition of, by alkaline leys ....	15, 178
		„ decomposition of, by biniodide of potassium ....	15, 177
		„ decomposition of, by camphor ....	15, 179
		„ decomposition of, by the electric current ....	15, 175
		„ decomposition of, by fat oils ....	15, 179

Pyroxylin, decomposition of, by friction and percussion ....	15, 175	protochloride of iron ....	15, 179
„ decomposition of, by heat ....	15, 175	Pyroxylin, decomposition of, by resins ....	15, 179
„ decomposition of, by hydrochloric acid ....	15, 178	„ decomposition of, by hot steam ....	15, 176
„ decomposition of, by hydrosulphate of ammonia ....	15, 178	„ decomposition of, by sulphuric acid ....	15, 177
„ decomposition of, by hydrosulphate of potassium ....	15, 179	„ decomposition of, by sulphurous acid ....	15, 178
„ decomposition of, by light ....	15, 537	„ decomposition of, by wax ....	15, 179
„ decomposition of, by oil of vitriol and metallic mercury ....	15, 179	„ formation of ....	15, 169
„ decomposition of, by nitric acid ....	15, 177	„ preparation of ....	15, 169
„ decomposition of, by permanganate of potash ....	15, 179	„ properties of ....	15, 172
„ decomposition of, by		„ solutions of ....	15, 179
		„ spontaneous decomposition of ....	15, 175
		Pyrrol ....	15, 5
		Pyrrol-red ....	15, 3, 535
		Pyruvates, metallic ....	9, 419—425
		Pyruvic acid ....	9, 418
		<i>Python amethystinus</i> , pigment from the bile of ....	18, 80

## Q.

Quadrat's compound resembling Benzoylazotide ....	12, 207	Quadrobromonaphthalin Hydrobromate ....	14, 36
Quadrobasic Arseniate of Cupric oxide ....	5, 472	Quadrobromophloretin ....	16, 10
„ Arsenite of Ferric oxide ....	5, 304	Quadrobutyromannitan ....	15, 376
„ Carbonate of Zinc-oxide ....	5, 14	Quadrochloro-camphor ....	14, 349
„ Hyponitrate of Lead-oxide ? ....	5, 153	Quadrochlor-hydrocarotin ....	17, 55
„ Hyposulphate of Cupric oxide ....	5, 424	Quadrochlorinated Hydrochloric Ether ....	9, 213
„ Nitrate of Zinc-oxide ....	5, 34	„ Hydrosulphuric Ether ....	9, 214
„ Nitrite of Lead-oxide ....	5, 152	Quadrochlorobutyric acid ....	10, 141
„ Phosphate of Cupric oxide ....	5, 419	Quadrochlorobutyral ....	10, 141
„ Phosphite of Lead-oxide ....	5, 129	Quadrochlorocarotin ....	17, 16
„ Sulphate of Cupric oxide ....	5, 425	Quadrochlorocinnamyl Hydride ....	13, 298
„ Sulphate of Ferric oxide ....	5, 242	Quadrochloronaphthalin, Bihydrochlorate ....	14, 62
„ Sulphate of Zinc-oxide ....	5, 22	Quadrochloronaphthalins ....	14, 59
„ Zinc-sulphate with Ammonia ....	5, 37	Quadrochlorosuccinic acid ....	10, 142
Quadroborate of Soda ....	3, 89	Quadrochlorosulphonaphthalic acid ....	14, 62
Quadrobromonaphthalin ....	14, 35	Quadrochlorotannaspidic acid ....	15, 499
„ bihydrobromate ....	14, 37	Quadrochloroterebene ....	14, 440
		Quadrochlorovalerates ....	11, 104
		Quadrochlorovalerianic acid ....	11, 103
		Quadrochlorovinic Acetate ....	9, 238
		Quadronitrocellulose ....	15, 167
		Quadronitrodulcite ....	15, 388
		Quadrosaccharides ....	15, 318
		Quadroselenite of Ammonia ....	2, 465
		„ Zinc-oxide ....	5, 27
		Quadrosilicate of Cupric oxide ....	5, 465
		„ Alumina ....	3, 418



- Quadrosilicate of Ferric oxide .... 5, 283  
 „ Ferrous oxide 5, 281  
 Quadrostearate of Dulcetyl .... 17, 128  
 „ Mannityl .... 17, 127  
 „ Pinityl .... 17, 126  
 Quadrosulphate of Antimonic  
 oxide .... 4, 361  
 Quadrotellurate of Ammonia .... 4, 415  
 „ Lithia .... 4, 423  
 „ Potash .... 4, 419  
 „ Soda .... 4, 421  
 Quadrotellurite of Ammonia .... 4, 414  
 „ Lime .... 4, 424  
 „ Lithia .... 4, 422  
 „ Potash .... 4, 417  
 „ Soda .... 4, 421  
 Qualitative alteration of ele-  
 ments by combi-  
 nation .... 1, 64—111  
 „ alteration of ele-  
 ments and com-  
 pounds by decom-  
 position .... 1, 134  
 Quantity of the electric current  
 of a galvanic bat-  
 tery, conditions de-  
 termining the  
 1, 413; 3, 415  
 „ the electric current,  
 Ohm's formulæ re-  
 lating to .... 1, 414  
 „ the electric current  
 produced by two  
 metals and one  
 liquid .... 1, 376  
 „ the electric current,  
 and quantity of  
 liquid decomposed,  
 relation between.... 1, 435  
 „ the products of de-  
 composition in the  
 voltaic current .... 1, 479  
 Quartation of Gold and Silver.... 6, 203  
 Quartz .... 4, 352  
 Quassia extract, eremacausis of 7, 92  
 Quassiin .... 14, 420  
 Queræscitrin .... 16, 500  
 Quercetamide .... 16, 495  
 Quercetic acid .... 16, 488  
 Quercetin .... 15, 347; 16, 490  
 Quercimelin, *see* Quercitrin.  
 Quercin .... 18, 238  
 Quercitartaric acid .... 15, 216  
 Quercite .... 15, 215  
 Quercitrin .... 15, 347; 16, 495  
 „ -sugar 15, 348; 16, 535  
 Quercetyl Bistearate .... 17, 126  
*Quercus Robur*, ferment-oil of.... 14, 406  
 Quick flux .... 3, 69  
 Quick lime, action of, on ace-  
 tone .... 13, 471  
 Quicksilver .... 6, 1  
 „ Fahl-ore .... 5, 494  
 Quillaia bark, preparation of sa-  
 ponin from .... 16, 86  
 Quills, composition of .... 18, 348  
 Quinces, ripe, ethereal liquid dis-  
 tilled from .... 12, 459  
 Quinhydrone .... 11, 164  
 Quinic acid, *see* Kinic acid.  
 Quinicine .... 17, 302  
 Quinidine, decompositions of .... 17, 298  
 „ hydrated .... 17, 298  
 „ Hydrochlorate with  
 Zinc-chloride .... 17, 300  
 „ memoirs relating to 17, 294  
 „ with Nitrate of Silver 17, 300  
 „ preparation of .... 17, 297  
 „ properties of .... 17, 297  
 „ salts .... 17, 298  
 „ solutions of.... 17, 298, 302  
 „ sources of .... 17, 296  
 „ varieties of.... 17, 295  
 Quinine .... 17, 262  
 „ with Anethol .... 17, 292  
 „ with Antimonic acid .... 17, 284  
 „ with Cinchona-red .... 17, 293  
 „ crystallised .... 17, 274, 615  
 „ crystallised, hydrate of 17, 274  
 „ decompositions of .... 17, 269  
 „ estimation of, in Cin-  
 chona bark .... 17, 268  
 „ hydrates .... 17, 273, 615  
 „ with Iodide of Iron .... 17, 284  
 „ memoirs relating to .... 17, 262  
 „ production of Chinoline  
 from, by distillation  
 with potash .... 17, 273  
 „ properties of .... 17, 269  
 „ reaction of, with Chlo-  
 ride of Iridium and  
 Sodium .... 17, 286  
 „ reaction of, with Chlo-  
 rine .... 17, 270  
 „ reaction of, with Chlo-  
 rine, Water, and Am-  
 monia .... 17, 271  
 „ reaction of, with Fluo-  
 silicic Alcohol .... 17, 284  
 „ reaction of, with Phos-  
 phantimonic acid .... 17, 284  
 „ reaction of, with Pyro-  
 gallic acid .... 17, 291  
 „ reaction of, with Ter-  
 chloride of Gold .... 17, 286  
 Quinine-salts :—  
 Acetate .... 17, 289  
 Antitartrate .... 17, 291

## Quinine-salts—(continued):—

Arseniate	....	17, 284, 615
Aspartate	....	17, 290
Benzoate	....	17, 617
Betuloretate	....	17, 404
Borate	....	17, 275
Carbonate	....	17, 275
Chlorate	....	17, 282, 615
Chloromercurate	....	17, 285
Chloroplatinate	....	17, 286
Chromate	....	17, 284, 616
Citrate	....	17, 292
Croconate	....	17, 291
Cyanurate	....	17, 289
Dextrotartrate	....	17, 291
Eugenate	....	17, 611
Formiate	....	17, 289
Hydriodates	....	17, 281, 635
Hydrochlorate	....	17, 282, 615
Hydrocyanate	....	17, 286
Hydroferricyanate	....	17, 287
Hydroferrocyanate	....	17, 287
Hydrofluat	....	17, 283
Hydrosulphocyanate	....	17, 288
Hypophosphite	....	17, 275
Hyposulphate	....	17, 277
Hyposulphite	....	17, 276
Iodate	....	17, 281
Kinate	....	17, 294
Lactate	....	17, 292
Mellitate	....	17, 289
Morittannate	....	17, 293
Nitrate	....	17, 283
Oleate	....	17, 294
Oxalate	....	17, 273, 615
Perchlorate	....	17, 382
Perchromate	....	17, 284
Periodate	....	17, 281
Phosphate	....	17, 276, 615
Pyrophosphate	....	17, 276
Picrate	....	17, 292
Rhodizonate	....	17, 291
Succinate	....	17, 290, 616
Sulphate	....	17, 277

## Quinine-salts—(continued):—

Sulphate with Orcin	....	17, 292
Sulphite	....	17, 277
Tannate	....	17, 293
Tartrate	....	17, 291
Urate	....	17, 291
Valerate	....	17, 290
Quinine, solutions of	....	17, 274, 294
„ sources of	....	17, 263
„ Winckler's amorphous	....	17, 305
„ and Cinchonine, preparation of	....	17, 264
„ and Cinchonine, proportions of, in Cinchona bark	....	17, 264
„ and Cinchonine, purification of	....	17, 265
„ Iron Sulphate	....	17, 284
Quinine and Potash, tartrate	....	17, 291
„ and Silver, nitrate	....	17, 285
Quinine-sulphuric acid	....	17, 507
Quinoïdine	....	17, 303
„ preparation of quinoïdine from	....	17, 297
Quinoleine	....	13, 243
Quinone	....	11, 158
Quinova-red	....	15, 486
Quinovatannic acid	....	15, 484
Quinovic acid, <i>see</i> Kinovic acid.		
Quintobasic Phosphate of Cupric oxide	....	5, 418
Quintobasic Sulphantimonite of Lead	....	5, 176
Quintochlorocarboic acid	....	11, 184
Quintochloromenthene	....	14, 480
Quintochloronaphththyl Chloride, <i>see</i> Sexchloronaphthalin.		
Quintochlorothymol	....	14, 442
Quintochlorotoluol, Bihydrochlorate	....	12, 292
„ Terhydrochlorate	....	12, 293
Quintochlorovinic Acetate	....	9, 238
Quirinus oil	....	12, 439

## R.

Racemate of Ammonia	....	10, 349
Racemate, Ammonio-ferric	....	10, 358
Racemate of Arsenious acid and Ammonia	....	10, 355
„ acid and Potash	....	10, 356
„ acid and Soda	....	10, 356
„ Baryta	....	10, 352
„ Boracic acid and Potash	....	10, 350
„ Boracic acid, Soda, and Potash	....	10, 352

Racemate Cerous	....	10, 355
„ Chromic	....	10, 355
„ of Cobalt	....	10, 358
„ Cobalt and Potassium	....	10, 358
„ Cupric	....	10, 359
„ Cuprous	....	10, 359
„ Ferric	....	10, 358
„ Ferrous	....	10, 357
„ of Lead	....	10, 357
„ Lime	....	10, 353

- Racemate of Magnesia.... 10, 354  
 „ Manganous .... 10, 355  
 „ Mercurous .... 10, 360  
 „ of Nickel .... 10, 359  
 „ Nickel and Ammo-  
 nia .... 10, 359  
 „ Potash .... 10, 350  
 „ Potash and Ammo-  
 nia .... 10, 350  
 „ Potassio-antimonic .... 10, 356  
 „ Potassio-cupric .... 10, 359  
 „ Potassio-ferric .... 10, 358  
 „ of Soda .... 10, 350  
 „ Soda and Ammonia 10, 351  
 „ Soda and Potash.... 10, 351  
 „ Sodio-cupric .... 10, 360  
 „ of Silver .... 10, 360  
 „ Stannous .... 10, 357  
 „ Strontia .... 10, 353  
 „ Zinc.... 10, 357  
 Racemic acid .... 10, 346  
 „ anhydrous .... 10, 361  
 „ crystallised .... 10, 348  
 „ copulated acids  
 produced by .... 7, 227  
 „ anhydride .... 10, 361  
 Racemomethylate of Potash .... 10, 362  
 Racemomethylic acid .... 10, 362  
 Racemovinic acid .... 10, 363  
 Radiant heat .... 1, 212  
 „ powers.... 1, 160  
 Radiating and absorbing powers,  
 reciprocity of .... 1, 213  
 Radicals, organic, substitution of,  
 for hydrogen .... 7, 74  
 „ terminology of .... 7, 9  
 Radical theory.... 7, 9  
 „ theory, and theory of  
 types and substitution,  
 connection between .... 7, 16  
 Radicals, two kinds of, to be con-  
 sidered in the binary theory 7, 12  
 Radish-oil .... 10, 56  
*Radix Meu*, acrid resin of .... 17, 450  
*Radix Pareiræ bravæ*, prepa-  
 ration of Pelosine  
 from .... 17, 25  
*Radix Sumbulus*, resin of .... 17, 453  
 Raewsky's Ammoniacal Plati-  
 num compounds .... 6, 309—312  
 Raimond Lully .... 1, 3  
 Rain-water, purity of .... 2, 60  
 Rangoon Naphtha, paraffin from 18, 168  
 Rape oil .... 17, 554  
 „ oil, preparation of Erucic  
 acid from .... 17, 550  
 Rapid combustion of organic  
 compounds .... 7, 84  
 Raspberry-camphor .... 14, 393  
 Ratanhia-red .... 15, 530  
 Ratanhiatannic acid .... 15, 529  
 Rational formulæ of organic  
 compounds .... 7, 8  
 Ray-liver oil .... 16, 326  
 Rays of heat, dispersion of .... 1, 165  
 „ light .... 1, 164  
 Razoumoffskin .... 3, 418  
 Realgar.... 4, 271  
 „ Phosphorus- .... 1, 194  
 Reaumur, Centigrade and Fah-  
 renheit Scales, com-  
 parative Table of .... 1, 237  
 „ porcelain .... 3, 384  
 Reciprocal affinity .... 1, 125—133  
 „ affinity, apparent  
 cases of .... 1, 132  
 „ affinity, influences  
 affecting .... 1, 125  
 „ affinity, works relat-  
 ing to .... 1, 133  
 Red acid of Annatto, resinous .... 16, 520  
 „ Cacao .... 16, 530  
 „ Colouring matters of ber-  
 ries .... 16, 528  
 „ Colouring matters of roots 16, 531  
 „ Copper-ore .... 5, 403  
 „ Ferrocyanide of Potassium 7, 468  
 „ of Flowers.... 16, 525  
 „ Hæmatite .... 6, 194  
 „ of Hypericum .... 16, 527  
 „ Iron-stone.... 5, 194  
 „ Lead .... 5, 118  
 „ Lead spar .... 4, 105; 5, 170  
 „ of Leaves .... 17, 1  
 „ Oxide of Copper .... 5, 403  
 „ Oxide of Iron .... 5, 194  
 „ Oxide of Lead .... 5, 118  
 „ Oxide of Mercury .... 6, 8  
 „ Prussiate of Potash .... 7, 468  
 „ Sulphide of Arsenic .... 4, 271  
 „ Zinc-ore .... 5, 10  
 Refined Copper.... 5, 398  
 „ Iron .... 5, 205  
 „ Steel .... 5, 206  
 Reflecting and retaining powers  
 of bodies for heat, reciprocity  
 of .... 1, 213  
 Reflection of Light .... 1, 164  
 Refraction of Organic Liquids.... 7, 64  
 Refraction of Light .... 1, 164  
 Refrangibility of Heat-rays .... 1, 213  
 Regnault's determinations of  
 the maximum  
 tension of aque-  
 ous vapour .... 1, 263  
 „ determinations of  
 the specific heat  
 of liquids .... 1, 247



Regnault's determinations of the specific heat of metals ....	1, 242	Resin of the Copaiba balsam of Para ....	17, 329
„ experiments on the expansion of gases by heat	1, 224	Resins of Copal, separation of	17, 405
<i>Regulus Antimonii martialis</i> ....	5, 310	Resin from <i>Cornus florida</i> ....	18, 222
„ <i>Antimonii medicinalis</i> .....	4, 359, 379	„ of Cubebs ....	17, 447
Reichenbach's Assamar ....	15, 248	„ the Daphnads ....	17, 178
„ Cholesterin from Coal-tar	18, 122	„ <i>Dracæna Draco</i> ....	17, 387, 618
„ Paraffin ....	18, 165	„ Elemi ....	17, 413
Reindeer's feet, ossein in ....	18, 352	„ <i>Ferula Asafætida</i> ....	17, 398
Relative heat ....	1, 238	„ Flowers ....	16, 513
Rennet, coagulation of casein by	18, 312	„ Galbanum ....	17, 239, 618
<i>Reseda luteola</i> , oil from the seeds of ....	16, 315	„ <i>Garcinia Mangostana</i> ....	17, 331
Residues, Gerhardt's Law of....	7, 76	„ Gomart ....	17, 415
<i>Resigaltum</i> ....	4, 273	Resins of <i>Grana Paradisi</i> ....	17, 450
Resin of Aldehyde ....	17, 456	Resin of Guaiacum ....	17, 247, 618
<i>Resina Jalapæ ex stipitibus</i> , preparation of Jalapin from....	16, 406	„ Icica ....	17, 421
Resin-acid of Narthecium ....	18, 237	„ Ivy ....	17, 415
Resineone ....	18, 10	Resins of Juniper berries ....	17, 449
Resin-oil, preparation of Toluene from ....	12, 227	Resin, Kawalier's, from <i>Pinus</i> <i>sylvestris</i> ....	15, 34
Resinone ....	18, 10	„ of Labdanum ....	17, 422
Resinous yellow of leaves ....	16, 515	„ <i>Laëtia resinosa</i> ....	17, 422
Resins, analysis of ....	17, 617	Resins from Lignite ....	17, 437
„ containing Benzoic or Cinnamic acid ....	17, 383	„ from the Lignite of Weis- senfels ....	17, 443
„ free from Benzoic acid	17, 396	„ of the bark of Lopez root	17, 450
„ fossil ....	17, 430	Resin of Manna, acrid....	17, 450
„ in general ....	17, 382, 618	„ Masopin ....	17, 422
Resin of Aldehyde ....	17, 456	Resins of Mastic ....	17, 423
„ Alouchi ....	17, 396	Resin of Olibanum ....	17, 427
Resins of Amber ....	17, 431	„ Opoponax ....	17, 427
Resin of <i>Amyris Caranna</i> ....	17, 404	„ <i>Paris quadrifolia</i> ....	18, 124
„ Anachuita-wood ....	17, 446	Resins of Peat ....	17, 442
„ Angelica-root ....	17, 446	„ Peru Balsam ....	17, 390
„ Angustura bark ....	17, 446	„ <i>Petasites vulgaris</i> ....	17, 451
„ <i>Araucaria brasiliensis</i> ....	18, 19	„ <i>Pimpinella saxifraga</i> ....	17, 451
„ from Arbol-a-Brea ....	17, 397	„ from <i>Pinus sylvestris</i> .....	15, 34; 18, 15, 16
„ from <i>Arctostaphylos Uva</i> <i>Ursi</i> ....	15, 421	„ extracted from plants	17, 436
Resins of Arnica-root ....	17, 363	„ of Poplar-buds ....	17, 451
Resin of Asafætida ....	17, 398	Resin of <i>Radix Sumbulus</i> (Sum- bul balsam) ....	17, 453
„ the bark of <i>Atherosper-</i> <i>ma Moschatum</i> ....	17, 447	Resins from <i>Rottlera tinctoria</i> ....	17, 378
Resins of Benzoin ....	17, 383, 617	Resin of Sagapenum ....	17, 428
Resin, Beta-thuja ....	15, 35	„ Sandaræ ....	17, 429
„ of <i>Bursera gummifera</i> or <i>B. acuminata</i> ....	17, 404	„ Settling Stones ....	17, 441
„ <i>Cannabis indica</i> ....	17, 447	„ Spanish Pepper ....	17, 450
„ <i>Ceradia fuscata</i> ....	17, 404	Resins of Squill ....	17, 451
„ <i>Ceroxylon Andicola</i> ....	17, 405	Resin of Tacamahac ....	17, 430
Resins from Cinnamon-oil ....	13, 264	Resins from Tolu-balsam .....	13, 290; 17, 393
Resin of Colocynth ....	16, 558	Resin of tuberos Jalap-root, so- luble in ether ....	16, 159
		„ Turpeth ....	17, 453
		Resins from Turpentine-oil ....	18, 20
		Resin of <i>Xanthorrhæa hastilis</i> ....	17, 386
		„ yellow, of Botany Bay ....	17, 386
		Resins, solutions of, in volatile oils ....	7, 169

- |                                                                                 |      |      |      |         |                                                                   |      |      |      |             |
|---------------------------------------------------------------------------------|------|------|------|---------|-------------------------------------------------------------------|------|------|------|-------------|
| Resorcin                                                                        | .... | .... | .... | 17, 240 | Rhodium sulphate                                                  | .... | .... | .... | 6, 362      |
| Respiratory passages, mucus of                                                  | .... | .... | .... | 18, 346 | Rhodium                                                           | .... | .... | .... | 6, 358      |
| Retarding cells in the voltaic current                                          | .... | .... | .... | 1, 478  | Rhodium, Ammonio-sesquichloride ?                                 | .... | .... | .... | 6, 364      |
| Retene                                                                          | .... | .... | .... | 17, 8   | „ Aqueous Sesquichloride....                                      | .... | .... | .... | 6, 364      |
| „ with Picric acid                                                              | .... | .... | .... | 17, 10  | „ Arsenide                                                        | .... | .... | .... | 6, 367      |
| „ with Picric acid and Benzene                                                  | .... | .... | .... | 17, 11  | „ Chlorides                                                       | .... | .... | .... | 6, 363      |
| „ -bisulphuric acid                                                             | .... | .... | .... | 17, 12  | „ Oxides                                                          | .... | .... | .... | 6, 359      |
| Retinaphtha                                                                     | .... | .... | .... | 12, 226 | „ preparation of                                                  | .... | .... | .... | 6, 255, 264 |
| Retinasphalt                                                                    | .... | .... | .... | 17, 440 | „ Protochloride                                                   | .... | .... | .... | 6, 363      |
| Retinerin, <i>see</i> Metanaphthalin.                                           | .... | .... | .... |         | „ Protoxide                                                       | .... | .... | .... | 6, 359      |
| Retinite                                                                        | .... | .... | .... | 17, 441 | „ Protosulphide                                                   | .... | .... | .... | 6, 362      |
| Retorts....                                                                     | .... | .... | .... | 1, 288  | „ reactions of                                                    | .... | .... | .... | 6, 361      |
| Retinyl                                                                         | .... | .... | .... | 13, 339 | „ -salts, solubility of, in alcohol                               | .... | .... | .... | 8, 272      |
| Rhabarberin                                                                     | .... | .... | .... | 16, 171 | „ Sesquichloride                                                  | .... | .... | .... | 6, 364      |
| Rhabarbic acid                                                                  | .... | .... | .... | 16, 171 | „ Sesquioxide                                                     | .... | .... | .... | 6, 360      |
| Rhamnetin                                                                       | .... | .... | .... | 16, 75  | „ Sesquisulphide                                                  | .... | .... | .... | 6, 362      |
| Rhamnin                                                                         | .... | .... | .... | 16, 80  | „ Sulphides                                                       | .... | .... | .... | 6, 362      |
| Rhamnocathartin                                                                 | .... | .... | .... | 16, 81  | „ and Bismuth, Alloy                                              | .... | .... | .... | 6, 368      |
| Rhamnotannic acid                                                               | .... | .... | .... | 16, 530 | „ and Copper, Alloy                                               | .... | .... | .... | 6, 368      |
| Rhamnoxanthin                                                                   | .... | .... | .... | 16, 76  | „ and Gold, Alloy                                                 | .... | .... | .... | 6, 368      |
| <i>Rhamnus catharticus</i> and <i>Rh. Frangula</i> , occurrence of Frangulin in | .... | .... | .... | 16, 76  | „ and Iron, carbide                                               | .... | .... | .... | 6, 368      |
| „ <i>Frangula</i> , bitter from the bark of                                     | .... | .... | .... | 18, 217 | „ and Lead, Alloy                                                 | .... | .... | .... | 6, 368      |
| <i>Rhaphigaster punctipennis</i> , preparation of Cimicic acid from             | .... | .... | .... | 16, 284 | „ and Silver, Alloy                                               | .... | .... | .... | 6, 369      |
| Rhaponticin                                                                     | .... | .... | .... | 16, 172 | Rhodizonate of Atropine                                           | .... | .... | .... | 16, 455     |
| Rhatany-root, Tannic acid from                                                  | .... | .... | .... | 15, 529 | „ Cinchonine                                                      | .... | .... | .... | 17, 218     |
| Rheadic acid                                                                    | .... | .... | .... | 16, 527 | Rhodizonates, metallic....                                        | .... | .... | .... | 10, 400     |
| Rheic acid, <i>see</i> Chrysophanic acid.                                       | .... | .... | .... |         | Rhodizonate of Morphine                                           | .... | .... | .... | 16, 436     |
| Rheumin                                                                         | .... | .... | .... | 16, 171 | „ Quinine                                                         | .... | .... | .... | 17, 291     |
| Rhinanthin                                                                      | .... | .... | .... | 18, 239 | „ Veratrine                                                       | .... | .... | .... | 18, 184     |
| Rhizomorphs, phosphorescence of                                                 | .... | .... | .... | 1, 188  | Rhodizonic acid                                                   | .... | .... | .... | 10, 398     |
| Rhodeoretin, <i>see</i> Convolvulin.                                            | .... | .... | .... |         | <i>Rhododendron ferrugineum</i>                                   | .... | .... | .... | 15, 530     |
| Rhodeoretinol, <i>see</i> Convolvulinol.                                        | .... | .... | .... |         | „ <i>ferrugineum</i> , Eri-colin in                               | .... | .... | .... | 16, 28      |
| Rhodiates of Ammonia                                                            | .... | .... | .... | 6, 364  | Rhodotannic acid                                                  | .... | .... | .... | 15, 530     |
| „ Lime                                                                          | .... | .... | .... | 6, 367  | Rhœadine                                                          | .... | .... | .... | 18, 206     |
| „ Potash                                                                        | .... | .... | .... | 6, 365  | Rhœaginine                                                        | .... | .... | .... | 18, 207     |
| „ Soda                                                                          | .... | .... | .... | 6, 367  | Rhombohedral Bismuth-glance                                       | .... | .... | .... | 4, 450      |
| Rhodic Acetate....                                                              | .... | .... | .... | 8, 334  | Rhomboïdal Saltpetre                                              | .... | .... | .... | 3, 117      |
| „ Arseniate ?                                                                   | .... | .... | .... | 6, 367  | Rhubarb bitter....                                                | .... | .... | .... | 16, 171     |
| „ Hydrate                                                                       | .... | .... | .... | 6, 361  | „ preparation of Chrysophanic acid from                           | .... | .... | .... | 16, 172     |
| „ Nitrate....                                                                   | .... | .... | .... | 6, 364  | „ -stalks, preparation of Malic acid from                         | .... | .... | .... | 10, 211     |
| „ Oxide                                                                         | .... | .... | .... | 6, 360  | „ -yellow                                                         | .... | .... | .... | 16, 171     |
| „ Phosphate                                                                     | .... | .... | .... | 6, 361  | <i>Rhus copallina</i> , Copal obtained from                       | .... | .... | .... | 17, 405     |
| „ Salts                                                                         | .... | .... | .... | 6, 361  | „ <i>coriaria</i> , preparation of Malic acid from the berries of | .... | .... | .... | 10, 211     |
| „ Sulphate                                                                      | .... | .... | .... | 6, 362  | „ <i>succedanea</i> , Japan wax obtained from                     | .... | .... | .... | 16, 393     |
| Rhodio-potassic Sulphate                                                        | .... | .... | .... | 6, 365  | Rhustannic acid                                                   | .... | .... | .... | 15, 531     |
| Rhodio-sodic acetate                                                            | .... | .... | .... | 8, 334  | Rice, preparation of Starch from                                  | .... | .... | .... | 15, 77      |
| „ -sodic Nitrate                                                                | .... | .... | .... | 6, 367  | Richter's law of neutralisation                                   | .... | .... | .... | 1, 120      |
| Rhodoso-rhodiates of Potash                                                     | .... | .... | .... | 6, 365  | „ researches on combining proportions                             | .... | .... | .... | 1, 6        |
| „ -rhodic oxide                                                                 | .... | .... | .... | 6, 359  |                                                                   |      |      |      |             |
| Rhodium oxide                                                                   | .... | .... | .... | 6, 359  |                                                                   |      |      |      |             |

Ricinelaïdamide	....	....	17, 148	Roger Bacon	....	....	1, 3
Ricinelaïdate of Ethyl	....	....	17, 144	Rolled Sulphur	....	....	2, 156
Ricinelaïdic acid	....	....	17, 135	Rollet's Hæmatin crystals	....	....	18, 404
Ricinelaïdin	....	....	17, 144	Roman Cement	....	....	3, 391
Ricinine	....	....	17, 143	„ Chamomile-oil, hydro-			
Ricinolamide	....	....	17, 147	carbon from	....	....	14, 309
„ preparation of oc-				„ Cumin-oil, preparation of			
tylic alcohol				cuminol from	....	....	14, 145
from	....	....	13, 184	Romans, chemical knowledge of	1,	3	
Ricinoleates Alkaline, decomp-				Roots, blue and red colouring			
sitions of	....	....	17, 132	matters of	....	....	16, 531
Ricinoleate of Ethyl	....	....	17, 143	Roots, leaves, &c., eremacausis			
Ricinoleates, metallic	....	....	17, 133	of aqueous infusions of	....	....	7, 92
Ricinoleic acid	....	....	17, 131	Rosacic acid	....	....	10, 200
„ preparation of oc-				Rose-camphor	....	....	14, 394
tylic alcohol from	13,	134		„ -oil	....	....	14, 393
<i>Ricinus communis</i> , castor-oil				„ -oil, Stearoptene of	....	....	14, 395
from the seeds of	....	....	17, 137	Rosellane	....	....	3, 448
Rinman's green	....	....	5, 353	Rosemary-oil	....	....	14, 395
Ripidolite	....	....	3, 422	Rose's fusible metal	....	....	5, 180
Roasting	....	....	1, 271	Rosite	....	....	3, 448; 14, 480
Robinin	....	....	16, 505	Rosolic acid	....	....	11, 153
<i>Roccella Montagnei</i> , preparation				Rotatory power, optical, of or-			
of erythric acid from	12,	382		ganic liquids	7,	64	
„ <i>tinctoria</i> , preparation of				„ „ optical, of sac-			
litmus from	....	....	12, 365	charine solu-			
„ <i>tinctoria</i> , preparation of				tions	....	....	15, 245
orsellic ether from	....	....	12, 373	<i>Rottlera tinctoria</i> , flocks from	17,	378	
Rocellanilide	....	....	16, 478	„ „ resins from	17,	378	
Rocellate of Cinchonine	....	....	17, 220	„ „ resinous co-			
„ Ethyl	....	....	16, 478	louring mat-			
Rocellates, metallic	....	....	16, 476	ter of	....	....	17, 378
Rocellic acid	....	....	16, 474	Rottlerin	....	....	14, 519
„ anhydride	....	....	16, 477	Roucou, <i>see</i> Annatto.			
Rocellinin	....	....	16, 296	Rough Steel	....	....	5, 206
Rochelle salt	....	....	10, 282	Rubellite	....	....	3, 455
Rock-crystal	....	....	3, 352	Ruberythric acid	....	....	16, 42
„ „ effect of, in induc-				Rubiaceates	....	....	16, 52
ing the combina-				Rubiacic acid	....	....	16, 50
tion of hydrogen				„ „ compound of, with			
and oxygen	....	....	2, 53	Rubiacin	....	....	16, 52
Rock-oil	....	....	12, 438	Rubiacin	....	....	16, 47
„ from Amiano	....	....	12, 439	„ preparation of, from			
„ „ Baku	....	....	12, 440	madder	....	....	16, 34
„ „ Niebylow in Gali-				Rubiadin	....	....	16, 53
cia	....	....	12, 441	Rubiadipin	....	....	16, 55, 60
„ „ Lake Tegern	....	....	12, 441	Rubiafin	....	....	16, 50
„ „ the naphthalife-				Rubiagin	....	....	16, 54
rous limestone of				Rubian, combinations of	....	....	16, 38
Travers	....	....	12, 441	„ decomposition of, by the			
„ „ obtained by distil-				albuminous matter of			
lation of bitumi-				<i>Helianthus tuberosus</i>	16,	37	
nous shale	....	....	12, 442	„ decomposition of, by al-			
„ combinations of	....	....	12, 445	kalis	....	....	16, 36
„ decompositions of	....	....	12, 443	„ decomposition of aque-			
„ vapour, tension of, at				ous solution of, by eva-			
different temperatures	1,	262		poration	....	....	16, 35
Rock-salt	....	....	3, 110	„ decomposition of, by			
„ diathermaney of	....	....	1, 214	chlorine	....	....	16, 36



Rubian, decomposition of, by erythrozym ....	16, 37	<i>Rumex obtusifolia</i> and <i>R. patientia</i> , preparation of chrysophanic acid from ....	16, 173
„ decomposition of, by heat ....	16, 35	Rumicin ....	16, 172
„ decomposition of, by oil of vitriol ....	16, 35	Runge's Carboic acid, preparation of ....	11, 143
„ decomposition of, by dilute sulphuric or hydrochloric acid ....	16, 35	Rusiochine ....	17, 272
„ memoirs relating to ....	16, 32	Russian black earth ( <i>Tschornosem</i> ), humous acids from ....	17, 473
„ preparation of ....	16, 33	Rust of Iron ....	5, 196
„ preparation of Alizarin from ....	14, 133	Rutheniate of Potash ? ....	6, 401
„ properties of ....	16, 35	Ruthenic acid ....	6, 399
„ sources of ....	16, 32	„ hydrate ....	6, 398
Rubianates ....	16, 40	„ oxide ....	6, 398
Rubianic acid ....	15, 348; 16, 36, 38	„ salts ....	6, 398
Rubianin ....	14, 133; 16, 56	„ sulphate ....	6, 399
„ formation of, from rubian ....	16, 36	Ruthenious oxide ....	6, 396
Rubic acid ....	12, 394	„ oxide and Potash, sulphite of ....	6, 402
Rubichloric acid ....	16, 66	Ruthenium ....	6, 394
Rubidehydran ....	16, 36, 45	„ chlorides ....	6, 400
Rubigin ....	16, 37	„ oxides ....	6, 396
Rubihydran ....	16, 36, 43	„ salts ....	6, 397
<i>Rubinus Antimonii</i> ....	4, 309	„ sulphides ....	6, 399
Rubiretin ....	14, 134; 16, 36, 57	„ and Ammonium, chloride of ....	6, 401
„ preparation of, from madder ....	16, 34	„ and Barium, chloride of ....	6, 404
Rubitannic acid ....	15, 532	„ and Potassium, chloride of ....	6, 403
Ruby ....	3, 305	„ and Sodium, chloride of ....	6, 404
„ arsenic ....	4, 271	Rutile ....	3, 466, 474
„ glass ....	3, 381; 6, 235	Rutilin, Mulder's ....	15, 435
Rue-oil ....	14, 489	Rutin ....	16, 500
„ compounds of, with alkaline bisulphites ....	14, 492	Rutyl, Hydride of ....	14, 489
„ preparation of pelargonic acid from ....	13, 369	Ryacolite ....	3, 436
Rufigallic acid ....	12, 412	Rye-mucedin ....	18, 444
Rufimorates ....	15, 477	Rye-starch, wax obtained from, by action of nitric acid ....	18, 162
Rufisulphuric acid, Mulder's ....	15, 435		

## S.

Sabadilla seeds, preparation of veratrine from ....	18, 179	Saccharates of Potash ....	11, 517
Sabadillic acid ....	18, 186	Saccharate of Silver ....	11, 522
Sabadilline ....	18, 184	Saccharates of Soda ....	11, 517
Saccharates ....	11, 516	„ Strontia ....	11, 518
„ of Ammonia ....	11, 516	„ Zinc ....	11, 519
„ Baryta ....	11, 518	Saccharic acid ....	11, 513
Saccharate of Bismuth ....	11, 519	Saccharides ....	15, 316
Saccharates of Cadmium ....	11, 520	Saccharimetry ....	15, 243
Saccharate, Chromic ....	11, 519	Saccharohumic acid ....	17, 474
Saccharates of Iron ....	11, 522	Saccharoïdal substances ....	15, 65
„ Lead ....	11, 520	„ substances, $C^{12}H^{10}O^{10}$ ....	15, 212
„ Lime ....	11, 518	„ substances, $C^{12}H^{10}O^{12}$ ....	15, 302
„ Magnesia ....	11, 519	Saccharose, <i>see</i> Cane-sugar.	
		<i>Saccharum Saturni</i> ....	8, 316

Sacc's Peptic acid from wood ....	15, 413	Salicin, decomposition of, by Emul-	
Safflower, effect of sunshine on		sin ....	15, 437
the colour of ....	7, 95	„ decomposition of, by Fer-	
„ -red.... ....	16, 202	ric salts ....	15, 437
„ -yellow ....	16, 204	„ decomposition of, by Fluo-	
Saffron, antimonial ....	4, 359	silicic alcohol ....	15, 437
„ decoloration of alcoholic		„ decomposition of, by Heat	15, 433
tincture of, in sun-		„ decomposition of, by Hy-	
shine.... ....	7, 96	drochloric acid....	15, 435
„ oil ....	14, 397	„ decomposition of, by Nitric	
„ preparation of Crocin		acid ....	15, 435
from ....	16, 508	„ decomposition of, by Osmic	
Sagapenum ....	17, 428	acid ....	15, 437
Sage-camphor ....	14, 399	„ decomposition of, by Ozone	15, 433
Sage-oil ....	14, 398	„ decomposition of, by Pe-	
Sagus, preparation of starch from		roxide of Lead ....	15, 433
the stems of various		„ decomposition of, by Saliva	15, 437
species of ....	15, 77	„ decomposition of, by Soda	15, 437
Saint Evre's acid, prepared from		„ decomposition of, by Sul-	
chloroniceic acid ....	10, 404	phuric acid ....	15, 434
<i>Sal Alembroth</i> ....	6, 89	„ decomposition of, when	
„ <i>alkali volatile</i> ....	2, 431	swallowed ....	15, 438
„ <i>amarum, anglicum, catharti-</i>		„ decomposition of, by Syn-	
<i>cum</i> ....	3, 236	aptase ....	7, 98
„ -ammoniac ....	2, 478	„ formation of, from Popu-	
„ -ammoniac, Chromate of ....	4, 143	lin ....	15, 431
„ -ammoniac containing Sesqui-		„ lead-compound of ....	15, 439
chloride of Iron ....	5, 264	„ memoirs relating to ....	15, 430
„ -ammoniac with Ethylochlori-		„ occurrence of, in ....	15, 431
ride of Platinum ....	8, 391	„ preparation of ....	15, 432
„ -ammoniac with Mercuric		„ preparation of Picric acid	
Amido-chloride ....	6, 87	from ....	11, 212
„ -ammoniac with Terchloride		„ preparation of Salicylic	
of Antimony ....	4, 378	acid from ....	12, 247
„ <i>ammoniacum fixum</i> ....	3, 207	„ properties of ....	15, 432
„ <i>ammoniacum secretum Glau-</i>		Salicon, syn. with Carbolic acid	11, 139
<i>beri</i> ....	2, 462	Salicyl, Bromide ....	12, 284
„ <i>digestivum Sylvii</i> ....	3, 56	„ Chloride ....	12, 294
„ <i>de duobus</i> ....	3, 39	„ Hydride ....	12, 235
„ <i>essentiale tartari</i> ....	10, 266	„ Iodide ....	12, 283
„ <i>febrifugum Sylvii</i> ....	3, 56	Salicylamic acid ....	12, 320
„ <i>microcosmicum</i> ....	3, 118	Salicylate, Acetic ....	12, 282
„ <i>mirabile Glauberi</i> ....	3, 100	„ of Ammonia ....	12, 250
„ <i>narcoticum vitrioli</i> ....	2, 97	„ Amyl, neutral ....	12, 258
„ <i>polychrestum Glaseri</i> ....	3, 39	„ Baryta ....	12, 251
„ <i>sedativum Hombergii</i> ....	2, 97	„ Benzoic ....	12, 283
„ <i>tartari</i> ....	3, 14	„ of Copper ....	12, 253
„ <i>urinæ nativum, s. fusibile</i> ....	3, 118	„ Copper and Ba-	
„ <i>vegetabile</i> ....	10, 275	rium ....	12, 254
„ <i>volatile salis ammoniaci</i> ....	2, 431	„ Copper and Potas-	
Salamander, poisonous secretion		sium ....	12, 254
from the cutaneous glands of	18, 244	„ Ethyl ....	12, 259
Salene ....	12, 231	„ Lead ....	12, 252
Salhydramide ....	12, 345	„ Lime ....	12, 252
Salicin ....	15, 348	„ Magnesia ....	12, 252
„ decomposition of, by Chlo-		„ Methyl, neutral ....	12, 258
rine ....	15, 434	„ Monobrominated	
„ decomposition of, by Elec-		Methyl....	12, 286
tricity ....	15, 433	„ Potash ....	12, 250

- |                                      |      |        |              |                                          |      |         |
|--------------------------------------|------|--------|--------------|------------------------------------------|------|---------|
| Salicylate of Silver                 | .... | ....   | 12, 254      | Salt, preparation of carbonate of        |      |         |
| Salicylic acid                       | .... | ....   | 12, 246      | soda from common                         | .... | 3, 79   |
| " acid, anhydrous                    | .... | ....   | 12, 282      | " sedative                               | .... | 2, 97   |
| " acid, resolution of, into          |      |        |              | " Seidlitz                               | .... | 3, 236  |
| carbonic acid and phe-               |      |        |              | " Seidschütz                             | .... | 3, 236  |
| nol                                  | .... | ....   | 12, 249      | " of Tartar                              | .... | 3, 18   |
| " ether                              | .... | ....   | 12, 259      | " of Wisdom                              | .... | 6, 89   |
| Salicylide of Acetyl                 | .... | ....   | 12, 245      | Saltpetre                                | .... | 3, 68   |
| " Benzoyl                            | .... | ....   | 12, 244      | " French method of puri-                 |      |         |
| Salicylimide                         | .... | ....   | 12, 323, 345 | fying                                    | .... | 1, 14   |
| Salicylite of Ammonia                | .... | ....   | 12, 230      | " prismatic                              | .... | 3, 68   |
| " Baryta                             | .... | ....   | 12, 242      | " rhomboïdal                             | .... | 3, 117  |
| " Copper                             | .... | ....   | 12, 243      | Salts, action of oxalic acid on          | .... | 13, 515 |
| " Iron                               | .... | ....   | 12, 243      | " anomalies in crystallisa-              |      |         |
| " Lead                               | .... | ....   | 12, 243      | tion of                                  | .... | 1, 10   |
| " Magnesia                           | .... | ....   | 12, 242      | " aqueous and igneous fusion             |      |         |
| " Mercury                            | .... | ....   | 12, 244      | of                                       | .... | 2, 64   |
| " Potash                             | .... | ....   | 12, 240      | " binary theory of                       | .... | 2, 15   |
| " Silver                             | .... | ....   | 12, 244      | " capillary                              | .... | 3, 313  |
| " Soda                               | .... | ....   | 12, 241      | " combination of, with water             | .... | 2, 63   |
| " Zinc                               | .... | ....   | 12, 242      | " copulated                              | .... | 7, 221  |
| Salicylosanilide                     | .... | ....   | 12, 349      | " decrepitating                          | .... | 1, 14   |
| Salicylous acid                      | .... | ....   | 12, 235      | " development of electricity             |      |         |
| " acid, Acetate of                   | .... | ....   | 12, 245      | by combination of, with                  |      |         |
| " acid, Benzoate of                  | .... | ....   | 12, 244      | one another                              | .... | 1, 322  |
| " acid with Bisulphite               |      |        |              | " development of electricity             |      |         |
| of Potash                            | .... | ....   | 12, 241      | by combination of, with                  |      |         |
| " acid with Bisulphite               |      |        |              | water and with acids                     | .... | 1, 321  |
| of Soda                              | .... | ....   | 12, 242      | " double                                 | .... | 2, 13   |
| " preparation of Salicy-             |      |        |              | " effect of solution of, on the          |      |         |
| lic acid from                        | .... | ....   | 12, 247      | solubility of gases in                   |      |         |
| Salicyluric acid                     | .... | ....   | 12, 331      | water                                    | .... | 2, 69   |
| Salifiable oxides                    | .... | ....   | 2, 39        | " efflorescence of                       | .... | 2, 64   |
| Saligenin                            | .... | ....   | 12, 233      | " expansion of, by heat                  | .... | 1, 234  |
| Saline solutions, freezing points    |      |        |              | " hydrated, dehydration of,              |      |         |
| of                                   | .... | ....   | 1, 254       | under the influence of                   |      |         |
| Saliretin                            | .... | ....   | 12, 231      | light                                    | .... | 1, 172  |
| " preparation of Salicy-             |      |        |              | " metallic, solubility of, in            |      |         |
| lous acid from                       | .... | ....   | 12, 236      | alcohol                                  | .... | 8, 265  |
| Salithol                             | .... | ....   | 12, 270      | " of organic acids, composi-             |      |         |
| Salivary glands, Mucin of            | .... | ....   | 18, 345      | tion of                                  | .... | 7, 207  |
| <i>Salix alba</i> , humous substance |      |        |              | " organic acids, distinc-                |      |         |
| from the rotten wood of              | 17,  | 472    |              | tion of, from salts of                   |      |         |
| " <i>pentandra</i> , ferment-oil of  | 14,  | 407    |              | inorganic acids                          | .... | 7, 211  |
| <i>Salpæ</i> , phosphorescence of    | .... | 1, 185 |              | " remarks upon the theory of             | .... | 2, 14   |
| Salseparin, <i>see</i> Pariglin.     |      |        |              | " simultaneous solution of               |      |         |
| Salt, bitter                         | .... | ....   | 2, 236       | three, in water                          | .... | 2, 73   |
| " -clay                              | .... | ....   | 3, 418       | <i>Salvia pratensis</i> , ferment-oil of | 14,  | 407     |
| " common                             | .... | ....   | 3, 110       | Samaderin                                | .... | 18, 239 |
| " common, electrolysis of            | .... | 1, 457 |              | Samanderine                              | .... | 18, 244 |
| " common, traces of mercury          |      |        |              | Samarskite                               | .... | 4, 19   |
| in                                   | .... | ....   | 6, 1         | Sand, platiniferous                      | .... | 6, 253  |
| " common, use of, for pre-           |      |        |              | Sandal-red                               | .... | 16, 259 |
| serving meat                         | .... | ....   | 7, 117       | Sandarac                                 | .... | 17, 429 |
| " double refined culinary            | .... | ....   | 3, 56        | Sandarach                                | .... | 4, 271  |
| " Epsom                              | .... | ....   | 3, 236       | <i>Sanguinaria canadensis</i> , prepa-   |      |         |
| " Glauber's                          | .... | ....   | 3, 100       | ration of Chelery-                       |      |         |
| " microcosmic                        | .... | ....   | 3, 118       | thrine from the                          |      |         |
| " phosphoric                         | .... | ....   | 3, 118       | roots of                                 | .... | 17, 157 |



<i>Sanguinaria canadensis</i> , second and third alkaloïds obtained from ....	17, 162	Schiller-spar ....	3, 397
Santalates ....	16, 260	<i>Schistostega osmundacea</i> , phosphorescence of ....	1, 188
Santalic acid, or Santalin ....	16, 259	Schleretinite ....	17, 441
Santonin ....	16, 249	Schlippe's Salt ....	4, 384
„ decompositions of ....	16, 251	Schorl ....	3, 454
„ metallic compounds of ....	16, 254	„ ordinary ....	3, 454
„ properties of ....	16, 251	„ titaniferous ....	3, 474
„ sources and preparation of ....	16, 250	Schröder's theory of volumes	1, 74
Saponaria-root, preparation of saponin from....	16, 85	Schützenberger's Carminic acids....	16, 207
Sapan-red ....	17, 542	Schwarz's Hæmatin ....	18, 403
Sapogenin ....	15, 53	Schweinfurt Green ....	8, 329
Saponifiable fats yielding glycerin	7, 227	„ Green with Butyric acid ....	10, 565
Saponification ....	7, 231	<i>Scilla maritima</i> , resin of ....	17, 451
Saponin ....	15, 348; 16, 84	Scillitin ....	17, 451
„ combinations of ....	16, 90	Sclerogen ....	15, 148
„ composition and properties of ....	16, 87	Scolezite ....	3, 438
„ decompositions of ....	16, 88	„ electric properties of ....	1, 320
„ preparation of ....	16, 85	<i>Scolopendra</i> , phosphorescence of	1, 185
Saponite ....	3, 421	Scoparin ....	17, 516
Sapphire ....	3, 305	Scotch-fir seed, oil of ....	16, 315
Sarcolactic acid ....	11, 498	Scrophularin ....	18, 239
Sarcosine ....	9, 432	Sculein ....	17, 451
Sarracinine ....	18, 208	Scurvy-grass oil ....	10, 55
Sarsaparilla-root, existence of pariglin in ....	16, 99	Scyllite....	15, 355
Sassafras-camphor ....	14, 161	Sea, phosphorescence of ....	1, 186
„ oil or essence ....	14, 161	„ -calf oil ....	16, 322
Saturation, capacity of....	2, 7	„ -fish, putrefying, phosphorescence of ....	1, 190
„ point of ....	1, 39	„ -owl, colouring matter of ....	18, 421
<i>Saturnus</i> , syn. of Lead ....	5, 105	„ -salt ....	3, 100
Savin oil ....	14, 310	„ -water, preparation of bromine from the mother liquor of ....	2, 273
Savite ....	18, 249	„ -weed, preparation of iodine from ashes of ....	2, 249
Scale of Equivalents, Wollaston's ....	1, 63	Seal oil....	16, 322
„ -oxide of Iron ....	5, 190	Sebacic acid ....	14, 493
Scales of Temperature ....	1, 8	„ ether ....	14, 499
Scammonic or Scammoninic acid, see Jalapic acid.		Sebacin ....	14, 447
Scammonolic acid, see Jalapino-lic acid.		Sebamic acid ....	14, 501
Scammony, preparation of Jalapin from ....	16, 406	Sebamide ....	14, 503
„ -resin ....	15, 349	Sebate of Ethyl ....	14, 499
Scanlan's liquid ....	9, 55	„ Methyl ....	14, 499
Scapolite ....	3, 432	Sebates of Ammonia ....	14, 497
Scheele, his chemical discoveries ....	1, 4	„ metallic ....	14, 497
Scheelitine ....	5, 166	Sebin ....	14, 500
Schelling's theory of the nature of matter ....	1, 159	Secondary charge in the voltaic circuit ....	1, 473
Schemes of chemical decomposition....	1, 13	„ forms of crystals ....	1, 19
Scheererite ....	18, 249	„ nuclei ....	7, 19, 23
		Sedative salt ....	2, 97
		Seeds, phenomena exhibited by, during fermentation ....	7, 101
		„ preparation of cholesterin from ....	18, 112
		Seidlitz salt ....	3, 236

Seidschütz salt ....	3, 236	Selenites ....	2, 238 ; 3, 183
Selenaldine ....	9, 315	Selenite of Alumina ....	3, 314
<i>Selenbleikupfer</i> ....	5, 486	„ Ammonia ....	2, 264
Selenethyl ....	8, 356	„ Baryta ....	3, 153
Seleniates ....	2, 241	„ Cadmic oxide ....	5, 59
Seleniate of Baryta ....	3, 154	„ Chromic oxide ....	4, 129
„ Cobalt-oxide ....	5, 334	„ Ceric oxide ....	3, 269
„ Cupric oxide ....	5, 433	„ Cerous oxide ....	3, 269
„ Cupric oxide and		„ Cobalt-oxide ....	5, 334
Potash ....	5, 460	„ Cupric oxide ....	5, 433
„ Lead-oxide ....	5, 140	„ Cuprous oxide ....	5, 432
„ Magnesia ....	3, 240	„ Ferric oxide ....	5, 247
„ Nickel-oxide ....	5, 374	„ Ferrous oxide ....	5, 247
„ Potash ....	3, 45	Selenites of Glucina ....	3, 298
„ Silver-oxide ....	6, 157	Selenite of Lead-oxide ....	5, 139
„ Soda ....	3, 105	„ Lime ....	3, 203
„ Zinc-oxide ....	5, 28	„ Lithia ....	3, 130
Selenic acid ....	2, 239	Selenites of Magnesia ....	3, 240
„ oxide ....	2, 236	Selenite of Manganous oxide ....	4, 226
Selenide of Aluminum ....	3, 314	„ Mercuric oxide ....	6, 33
„ Ammonium ....	2, 464	„ Mercurous oxide ....	6, 33
„ Ammonium and Hy-		„ Nickel-oxide ....	5, 374
drogen ....	2, 464	Selenites of Potash ....	3, 44
„ Antimony ....	4, 362	Selenite of Silver-oxide ....	6, 156
„ Arsenic ....	4, 280	Selenites of Soda ....	3, 104
„ Barium ....	3, 153	Selenite of Stannic oxide ....	5, 82
„ Bismuth ....	4, 436	„ Strontia ....	3, 175
„ Cacodyl ....	9, 339	Selenites of Zinc-oxide ....	5, 27
„ Calcium ....	3, 202	Selenite of Uranic oxide ....	4, 178
„ Cerium ....	3, 269	„ Yttria ....	3, 288
„ Cobalt ....	5, 334	„ Zirconia ....	3, 345
„ Copper and Lead ....	5, 485	Selenium ....	2, 231
„ Cupric ....	5, 432	„ Bromide ....	2, 285
„ Cuprous ....	5, 432	„ Chlorides ....	2, 345
„ of Ethyl ....	8, 356	„ Chloride, sulphate of ?	2, 346
„ Glucinum ....	3, 298	„ detection of, in sulphur	2, 156
„ Iron ....	5, 246	„ Fluoride ....	2, 365
„ Lead ....	5, 139	„ Iodide ....	2, 268
„ Magnesium ?	3, 239	„ in oil of vitriol ....	2, 244
„ Mercury ....	6, 32	„ -mercaptan ....	8, 357
„ Mercury and Lead ....	6, 127	„ -salts ....	2, 9
„ Mercury and Zinc ....	6, 123	Seleniuretted Hydrogen ....	2, 241
„ Palladium ....	6, 347	<i>Selenkupferblei</i> ....	5, 485
„ Phosphorus ....	2, 242	Selenmethyl ....	10, 491
„ Platinum ....	6, 290	Selenocyanide of Potassium, solu-	
„ Potassium ....	3, 43	bility of, in alcohol ....	8, 273
„ Silver ....	6, 155	Selenocyanides ....	8, 122
„ Silver and Copper ....	6, 198	<i>Semen contra</i> , oil of ....	14, 316
„ Stibethyl ....	9, 82	„ <i>Cynæ</i> , see Wormseed.	
„ Sulphur ....	2, 243	„ <i>Ricini</i> , acrid soft resin	
„ Tellurium ....	4, 408	of ....	17, 451
„ Tin ....	5, 82	Semibenzidam ....	11, 293
„ Triethylphosphine ....	12, 525	Semi-conductors of electricity ....	1, 311
„ Yttrium ....	3, 288	Semihydrate of Dammaryl ....	17, 333
„ Zinc ....	5, 27	Seminaphthalidine, see Seminaph-	
Selenides or Seleniurets, metallic	2, 244	thylamine.	
Selenious acid ....	2, 236	Seminaphthylamine ....	14, 107
„ solubility of, in		Semi-opal ....	3, 461
alcohol ....	8, 264	Senegin ....	16, 91

Senna-leaves, bitter of ....	18, 240	Sesquichloride of Iridium and	
Sensible heat ....	1, 252	Ammonium	6, 382
Separating affinity ....	1, 124	Iridium and	
Sepia ....	18, 418	Potassium ....	6, 385
Septichlorovinic acetate ....	9, 239	Iridium and	
Sericin, syn. with Fibroïn and		Sodium ....	6, 390
with Myristin.		Iron ....	5, 253
Series, arrangement of organic		Iron and Am-	
compounds in ....	7, 23	monium ....	5, 263
Serin of Denis ....	18, 271	Iron and Po-	
Serine ....	18, 368	tassium ....	5, 271
Serpentaria-bitter ....	18, 216	Osmium and	
Serpentaria-oil ....	14, 400	Ammonium	6, 416
Serpentine, noble ....	3, 395	Osmium and	
Serpents' bile, pigment of ....	18, 80	Potassium ?	6, 418
„ eggs, phosphorescence		Rhodium ....	6, 364
of ....	1, 183	Ruthenium ....	6, 401
Serum-albumin ....	18, 274	Ruthenium	
„ „ electrolysis of ....	18, 278	and Ammo-	
„ „ oxidation of ....	18, 278	nium ....	6, 401
„ „ precipitation of,		Ruthenium	
by alcohol ....	18, 281	and Barium	6, 404
„ „ reactions of,		Ruthenium	
with alkalis ....	18, 279	and Potassium	6, 403
„ „ reactions of,		Ruthenium	
with carbolic		and Sodium	6, 404
and pyrogallic		Titanium ....	3, 479
acids ....	18, 281	Sesquicyanide of Iron ....	7, 448
„ „ reactions of,		Sesquifluoride of Chromium with	
with metallic		Hydrofluat of	
salts ....	18, 280	Ammonia ....	4, 143
„ -casein ....	18, 271	Chromium with	
Serum, Eichwald's analysis of	18, 275	Fluoride of Po-	
„ of Muscle ....	18, 267	tassium ....	4, 151
Sesame-oil ....	17, 98	Chromium with	
Sesqui-arsenate of Ferric oxide	5, 307	Fluoride of So-	
Sesquibasic Carbonate of Lead-		dium ....	4, 152
oxide ....	5, 123	Iron ....	5, 256
„ Chromate of Lead-		Iron and Silicium	5, 288
oxide ....	5, 170	Iron and Potas-	
„ Cupric acetate ....	8, 325	sium ....	5, 271
„ Nitrate of Mercurous		Sesqui-hydrosulphate of Cyano-	
oxide ....	6, 71	gen ....	8, 116
„ Sulphantimonite of		Sesqui-iodide of Platinum ....	6, 291
Lead ....	5, 176	Sesquioxide of Chromium and	
Sesquibromide of Iron ....	5, 250	Iron with Pro-	
Sesquibromocinchonine ....	17, 235	toxicide of Iri-	
Sesquicarbonate of Ammonia ....	2, 431	dium? ....	6, 425
„ Baryta ....	3, 140	Cobalt ....	5, 322
„ Cupric oxide ....	5, 415	Iridium ....	6, 372
„ Potash ....	3, 22	Iridium with Pot-	
Sesquichlorhydrocarbonate of		ash ....	6, 383
Diplatinamine ....	6, 309, 317	Iron ....	5, 194
Sesquichlorhydronitrate of Di-		Lead ? ....	5, 120
platinamine ....	6, 312	Osmium ?	6, 406
Sesquichlorhydrophosphate of		Osmium with Pot-	
Diplatinamine ....	6, 309, 318	ash ....	6, 417
Sesquichloride of Carbon ....	9, 220	Rhodium ....	6, 360
„ Iridium ....	6, 379	Ruthenium ....	6, 397



Sesquioxide of Tin ....	5, 70	Silica, Hydrochlorate ....	3, 361
Sesquiphosphate of Ferric oxide	5, 226	„ Nitrate ....	3, 368
Sesquiselenite of Ferric oxide ....	5, 247	„ -salts ....	3, 357
Sesquisilicate of Alumina ....	3, 414	„ -solution ....	3, 356
„ Ferric oxide ....	5, 282	„ Sulphate ....	3, 360
„ Lime ....	3, 389	„ Terhydrofluatc ....	3, 366
„ Magnesia ....	3, 400	„ and Antimonic oxide, hy-	
„ Magnesia and		drofluatc ....	4, 390
„ Lime....	3, 408	„ and Manganous oxide, hy-	
Sesquistannethyl ....	13, 507	drofluatc ....	4, 244
Sesquisulphate of Ferric oxide ....	5, 243	„ and Molybdic acid, hydro-	
„ Ferrous oxide ?	5, 241	fluatc ....	4, 79
„ Potash ....	3, 40	„ and Molybdic oxide, hy-	
Sesquisulphide of Cerium ....	3, 267	drofluatc ....	4, 79
„ Cobalt ....	5, 332	„ and Molybdous oxide, hy-	
„ Iridium ....	6, 376	drofluatc ....	4, 79
„ Iron ....	5, 231	„ and Potash, carbonate ....	3, 373
„ Rhodium ....	6, 362	„ and Soda, carbonate ....	3, 386
„ Tin ....	5, 79	„ and Uranous oxide, hydro-	
Settling Stones, resin of ....	17, 441	fluatc ....	4, 192
Sexbasic Bromate of Cupric ox-		„ and Vanadic acid, hydro-	
ide ....	5, 437	fluatc ....	4, 104
„ Nitrate of Cobalt-oxide	5, 338	„ and Vanadic acid, phos-	
„ Nitrate of Lead-oxide....	5, 156	phate....	4, 103
„ Nitrate of Mercuric ox-		„ and Vanadic oxide, hydro-	
ide ....	6, 74	fluatc ....	4, 103
„ Phosphate of Cupric		„ and Zinc-oxide, hydro-	
oxide ....	5, 418	fluatc ....	5, 47
„ Sulphantimonite of		Silicates ....	3, 357
Lead ....	5, 175	„ of Alumina ....	3, 411
„ Sulphate of Ferric oxide	5, 241	Silicate of Alumina with Fluoride	
„ Sulphate of Zinc-oxide	5, 22	of Silicium or Fluoride of	
Sexborate of Magnesia ....	3, 232	Aluminum ....	3, 419
„ Potash ....	3, 26	Silicates of Alumina and Man-	
„ Soda ....	3, 89	ganous oxide ....	4, 245
Sexchlorocamphor ....	14, 349	„ Alumina, compounds	
Sexchloronaphthalin ....	14, 63	of, with the Sili-	
Sexchlorotoluol....	12, 293	cates of Potash, Soda,	
Sexselenite of Ferric oxide ....	5, 247	Lithia, Baryta, Stron-	
Sexstearate of Mannityl ....	17, 127	tia, Lime, Magnesia,	
Sextichlorovinic acetate ....	9, 238	Protoxide of Cerium,	
Seybertite ....	3, 462	Yttria, Glucina, Pro-	
Shark-oil ....	16, 322	toxide of Manganese	
Shear-steel ....	5, 206	and Protoxide of Iron	3, 420
Shellac ....	17, 420	„ Ammonia ....	3, 368
Shellac, fat or wax of ....	16, 399	Silicate of Amyl, bibasic ....	11, 65
Shellac, wax of....	18, 162	„ Baryta ....	3, 387
Siberite....	3, 455	„ Baryta and Potash....	3, 388
<i>Siderum</i> ....	5, 222	„ Cerium ....	3, 408
Silica ....	3, 352	„ Cobalt-oxide ....	5, 345
„ Amorphous ....	3, 355	Silicates of Cupric oxide ....	5, 464
„ Arseniate ? ....	4, 311	„ Ferric oxide ....	5, 281
„ Chromate? ....	4, 155	Silicate of Ferric oxide with Car-	
„ compound of, with acids	3, 357	bonate of Soda ....	5, 233
„ with Crenic acid ....	17, 468	„ Ferrous oxide ....	5, 278
„ crystallised ....	3, 354	Silicates of Glucina ....	3, 410
„ with Fluoride of Sodium	3, 387	Silicate of Glucina and Lime ....	3, 411
„ with Fluxes ....	3, 386	„ Glucina and Manga-	
„ Hydrate....	3, 356	nous oxide ....	4, 245

Silicate of Lead-oxide ....	5, 165	with 1 atom of alumina ....	3, 428
„ Lead-oxide and an Alkali ....	5, 166	Silicates, double, containing 2 atoms of stronger base, with 3 atoms of alumina ....	3, 447
Silicates of Lime ....	3, 388	„ double, containing 3 atoms of stronger base with 2 atoms of alumina ....	3, 429
Silicate of Lime and Potash ....	3, 393	„ double, containing 3 atoms of stronger base with 1 atom of alumina ....	3, 425
„ Lime and Soda ....	3, 394	„ double, containing 3 atoms of stronger base with 4 atoms of alumina ....	3, 425
Silicates of Magnesia ....	3, 395	„ double, containing 4 atoms of stronger base with 1 atom of alumina ....	3, 422
Silicate of Magnesia with Aluminate of Magnesia	3, 462	„ double, containing 5 atoms of stronger base with 1 atom of alumina ....	3, 422
„ Magnesia with Fluoride of Magnesium	3, 401	„ double, containing 6 atoms of stronger base with 1 atom of alumina ....	3, 421
Silicates of Magnesia and Lime	3, 401	„ double, containing 7 to 10 atoms of stronger base with 1 atom of alumina ....	3, 420
Silicate of Manganic oxide ....	4, 244	Siliceous Calamine ....	5, 46
„ Manganous oxide ....	4, 242	„ minerals, occurrence of manganese in, as colouring matter ....	4, 195
„ Mercurous oxide ....	6, 110	Silicide of Bismuth ....	4, 448
„ Molybdic oxide ....	4, 78	„ Copper ....	5, 464
„ Molybdous oxide ....	4, 78	„ Iron....	5, 277
Silicates of Potash ....	3, 369	„ Lead ....	5, 165
„ Soda ....	3, 375	„ Platinum ....	6, 330
Silicate of Strontia ....	3, 388	„ Potassium ....	3, 369
„ Strontia and Potash	3, 388	„ Tin ....	5, 100
„ Thorina ....	3, 463	Silicium ....	3, 350
„ and Titanate of Lime....	3, 488	„ allotropic forms of	3, 352
„ and Titanate of Potash	3, 487	„ alloys ....	3, 465
„ of Vanadic oxide ....	4, 103	„ Ammonio-chloride ....	3, 368
Silicates of Yttria ....	3, 409	„ Ammonio-fluoride ....	3, 368
Silicate of Zinc-oxide ....	5, 46	„ in bar iron ....	5, 205
„ Zinc-oxide and Potash	5, 47	„ Bromide ....	3, 360
„ Zirconia ....	3, 463	„ Bromide, expansion of, by heat ....	1, 226, 229
„ Zirconia and Lead-oxide ....	5, 166	„ Carbide ? ....	3, 359
„ Zirconia and Lime ....	3, 463	„ Cast iron ....	5, 215
„ Zirconia and Potash	3, 463	„ Chloride ....	3, 360
Silicates, double, compounds of, with borates ....	3, 453	„ Chloride, expansion of, by heat ....	1, 226, 229
„ double, compounds of, with carbonates ....	3, 452		
„ double, compounds of, with chlorides ....	3, 461		
„ double, compounds of, with fluorides ....	3, 461		
„ double, compounds of, with sulphates ....	3, 456		
„ double, containing 1 atom of stronger base with 1 atom of alumina	3, 431		
„ double, containing 1 atom of stronger base with from 2 to $2\frac{1}{2}$ atoms of alumina ....	3, 448		
„ double, containing 1 atom of stronger base with 3 atoms of alumina ....	3, 449		
„ double, containing 1 atom of stronger base four atoms of alumina	3, 452		
„ double, containing 2 atoms of stronger base			

Silicium	Chlorosulphide	....	3, 361	Silver, alloys	....	6, 177—18
„	Fluoride	....	3, 362	„	-amalgam, artificial	.... 6, 1
„	Fluoride with Ani-	....		„	-amalgam, native	.... 6, 1
„	line	....	11, 259	„	Ammonio-bromide	.... 6, 1
„	Fluoride with Sili-	....		„	Ammonio-chloride	.... 6, 1
„	cate of Alumina	....	3, 419	„	Ammonio-cobaltidcyanide	8, 2
„	Fluoride with Nitric	....		„	Ammonio-cyanide	.... 8, 2
„	oxide, &c.	....	3, 368	„	Ammonio-iodide	.... 6, 17
„	Fluoride, solubility of,	....		„	Antimonide	.... 6, 189
„	in alcohol	....	8, 269	„	Arsenide	.... 6, 186
„	Hydride	....	3, 359	„	Auridcyanide	.... 8, 42
„	Oxide	....	3, 352	„	auriferous	.... 6, 247
„	Sulphide	....	3, 359	„	auriferous, telluride of	.... 6, 250
„	and Ammonium, fluoride	3, 368		„	Aurocyanide	.... 8, 42
„	and Barium, fluoride	3, 387		„	-bismuth....	.... 6, 193
„	and Calcium, fluoride	3, 393		„	Biselenide	.... 6, 156
„	and Chromium, fluoride	4, 156		„	-blende, antimonial	.... 6, 190
„	and Cobalt, hydrated	....		„	-blende, arsenical	.... 6, 188
„	fluoride	....	5, 345	„	blowpipe reactions of,	
„	and Glucinum, fluoride	3, 410		„	with Borax and Micro-	
„	and Iron, fluorides	5, 288		„	cosmic salt	.... 6, 179
„	and Lithium, fluoride	3, 387		„	Bromide	.... 6, 159
„	and Magnesium, fluoride	3, 400		„	Carbide	.... 6, 146
„	and Nickel, hydrated	....		„	Chloride, decomposition	
„	fluoride	....	5, 386	„	of, by light	.... 2, 173
„	and Potassium, fluoride	3, 374		„	Chloride, reduction of	.... 6, 428
„	and Potassium, nitride	3, 375		„	Chloride, solubility of, in	
„	and Potassium, sulphide	3, 373		„	hydrochloric acid	.... 6, 428
„	and Silver alloy	....	6, 182	„	Chloriodide	.... 6, 167
„	and Silver, carbide	....	6, 182	„	Chlorobromide	.... 6, 167
„	and Silver, fluoride	....	6, 182	„	Chromidcyanide	.... 8, 31
„	and Sodium, fluoride	3, 386		„	Cobaltidcyanide	.... 8, 32
„	and Strontium, fluoride	3, 388		„	-copper	.... 6, 197
„	and Yttrium, fluoride	3, 410		„	Cuprocyanide	.... 8, 33
„	and Zirconium, fluoride	3, 463		„	Cyanide....	.... 8, 26
Silicofluorides	....	....	3, 364	„	Cyanide, compounds of	13, 410
Silicofluoride of Cadmium	....	5, 64		„	dark-red	.... 6, 190
„	Cupric	....	5, 465	„	decomposition of chloride	
„	Cuprous	....	5, 465	„	of, by metallic sulphides	
„	of Lead	....	5, 166	„	and arsenides	.... 6, 428
„	Mercuric....	....	6, 110	„	Dichloride	.... 6, 162
„	Mercurous	....	6, 110	„	Fahl-ore	.... 5, 493
„	of Platinum	....	6, 330	„	Ferridcyanide	.... 8, 32
„	Potassium	....	3, 374	„	Ferrocyanide	.... 8, 31
„	Tin	....	5, 100	„	fine or cupelled	.... 6, 133
Silk, colouring matter of yellow	....	....		„	-fir cones, oil of	.... 16, 316
„	raw	....	18, 367	„	Fluoride	.... 6, 168
„	-gelatin or Silk-jelly	....	18, 366	„	fulminating, Berthol-	
„	(Jama-may)	....	18, 364	„	let's	.... 6, 172
„	(Jama-may) colouring mat-	....		„	fulminating, doublesalts of	9, 308
„	ter of	....	18, 368	Silvering by galvanic precipita-		
„	preparation of Picric acid	....		tion	....	1, 501
„	from	....	11, 213	Silver, German....	....	5, 497
„	substance of	....	18, 363	„	-glance	.... 6, 151
„	wax of raw	....	18, 162	„	Hydrothiosulphocyanide	8, 101
Silkworms, fatty oil of....	....	17, 98		„	Hyposulphophosphite	.... 6, 155
„	occurrence of gum in	15, 196		„	Iodide	.... 6, 157
Sillimanite	....	....	3, 413	„	Iodide with Nitrate of	
Silver	....	....	6, 132	„	Mercuric oxide	.... 6, 199



Silver-iron ....	6, 195	Silver : Oxysalts ( <i>continued</i> ) :	
„ -lead ....	6, 194	Benzoylsalicylamate ....	12, 325
„ -leaf, effect of, in inducing the combination of oxygen and hydrogen....	2, 52	Betuloretate ....	17, 404
„ light red ....	6, 188	Bibromacetate ....	12, 535
„ Mellonide ....	9, 394	Bibromisatate ....	13, 72
„ memoirs, history, sources of ....	6, 132	Bichlorosulphosomethylate ....	7, 303
„ Mercaptide ....	8, 347	Biethylecyanurate ....	13, 565
„ Manganidcyanide ....	8, 31	Binitrobenzoate ....	12, 136
„ -nickel ....	6, 196	Binitroethylates ....	12, 560
„ Nitrocyanide ....	8, 29	Binitrodiphenamate ....	11, 346
„ Nitroprusside ....	8, 134	Binitrosalicylate ....	12, 316
„ -ores, treatment of, by amalgamation ....	6, 134	Bisulphanilate ....	11, 299
„ -ores, treatment of, by the method of precipi- tation....	6, 133	Bisulphetholate ....	12, 517
„ -oxide ....	6, 139	Bisulphometholate ....	12, 485
„ -oxide with Ammonia ....	6, 172	Borate ....	6, 147
„ -oxide with Glass-fluxes....	6, 182	Bromacetate ....	12, 533
Silver : Oxysalts of :		Bromanisate ....	13, 133
Acetamidate ....	12, 545	Bromate ....	6, 160
Acetate ....	8, 333	Bromobenzoate ....	12, 107
Acetopropionate ....	9, 408	Bromocomenate ....	11, 392
Aconitate ....	11, 456	Butyrate ....	10, 88
Acrylate ....	9, 371	Cacodylate ....	9, 331
Albuminate ....	18, 306	Campholate ....	14, 455
Alloxanate ....	10, 169	Camphorate ....	14, 463
Alphatoluate ....	17, 153	Caprate ....	14, 488
Amidanisate ....	13, 144	Caproate ....	11, 418
Amidobenzoate ....	12, 146	Caprylate ....	13, 193
Ammonio-nitrate ....	6, 177	Carbobenzoate ....	12, 48
Ammonio-oxalate ....	13, 529	Carbonate ....	6, 146
Ammonio-sulphate ....	6, 174	Cerotate ....	18, 137
Amylophosphate ....	11, 51	Chelidonate ....	12, 421
Amylosulphate ....	11, 60	Chloranilamate ....	11, 242
Amylosulphite ....	11, 53	Chloranilate ....	11, 192
Amylotartrate ....	11, 82	Chlorate ....	6, 167
Amyloxalate ....	11, 73	Chlorisatide ....	13, 74
Anacardate ....	17, 522	Chlorite ....	6, 166
Anchoate ....	13, 375	Chlorobenzoate ....	12, 115
Angelate ....	10, 416	Chlorocinnamate ....	13, 296
Anisate ....	13, 127	Chlorocomenate ....	11, 391
Anthranilate....	12, 329	Chloroniceate ....	11, 177
Antimoniate ....	6, 189	Chloronitrobenzoate ....	12, 139
Apoglucate ....	13, 367	Chlorosulphosomethylate ....	7, 302
Apophyllate ....	13, 156	Cholate ....	18, 51
Apophyllo-nitrate ....	13, 156	Cholesterate acid ....	13, 159
Arachidate ....	17, 372	Choloïdate ....	18, 55
Arseniate ....	6, 186	Chromate ....	6, 184
Arsenite ....	6, 186	Chrysammate ....	12, 6
Arsenmethylate ....	13, 497	Chrysanilate ....	12, 331
Aspartate ....	10, 238	Chrysanisate ....	12, 303
Azelaate ....	17, 82	Cimicate ....	16, 285
Benzilate ....	12, 183	Cinnamate ....	13, 277
Benzoate ....	12, 45	Citraconate ....	10, 423
Benzoglycolate ....	12, 68	Citrates ....	11, 460
		Comenate ....	11, 388
		Convolvulate ....	16, 159
		Convolvulinolate ....	16, 153
		Copaivate ....	17, 327
		Cotarnate ....	16, 134
		Crenate ....	17, 468

## Silver : Oxysalts :

Croconate	....	....	10, 395
Cumarate	....	....	13, 318
Cuminate	....	....	14, 151
Cyanate	....	....	8, 68
Cyanurate	....	....	9, 456
Cyanurate with Ammonia	....	....	9, 457
Diliturate	....	....	10, 182
Elaidate	....	....	17, 77
Erucate	....	....	17, 551
Ethylcamphorate	....	....	14, 466
Ethylmeconate	....	....	12, 432
Ethylphosphate	....	....	8, 401
Ethylsulphite....	....	....	8, 411
Ethylsulphobenzoate	....	....	12, 64
Ethyltrithionate	....	....	12, 515
Euchroate	....	....	10, 21
Everninate	....	....	16, 446
Formiate	....	....	7, 282
Fulminate, acid	....	....	9, 309
Fulminate, neutral	....	....	9, 303
Fulminurate	....	....	10, 561
Fumarate	....	....	10, 31
Gaedinate	....	....	16, 320
Gambodate	....	....	17, 419
Glycerate	....	....	13, 572
Glycolate	....	12, 510 ; 13, 437	
Glyoxylate	....	12, 507 ; 13, 435	
Gurgunate	....	....	17, 546
Hemipinate	....	....	14, 431
Hippurate	....	....	12, 80
Hydrobromate, acid	....	....	6, 160
Hydrochlorate, acid	....	....	6, 166
Hydropiperate	....	....	15, 13
Hyoglycocholate	....	....	18, 106
Hypobromite....	....	....	6, 160
Hypochlorite....	....	....	6, 166
Hyposulphate	....	....	6, 153
Hyposulphite....	....	....	6, 152
Inosate	....	....	11, 120
Insolinate	....	....	13, 321
Iodate	....	....	6, 158
Isamate	....	....	13, 111
Isatate	....	....	13, 55
Isatide	....	....	13, 54
Isobiglycoethylenate	....	....	15, 237
Isotartrate	....	....	10, 333
Itaconate	....	....	10, 427
Jalapinolate	....	....	16, 403
Japonate	....	....	12, 395
Kinate	....	....	16, 233
Kinovate	....	....	18, 25
Lactate	....	....	11, 495
Laurate	....	....	15, 48
Leucate	....	....	15, 63
Lichenate	....	....	16, 196
Linoleate	....	....	16, 308
Lipate	....	....	10, 435
Lithofellate	....	....	17, 377

## Silver : Oxysalts :

Malate	....	....	10, 226
Maleate	....	....	8, 159
Malonate	....	....	13, 562
Mandelate	....	....	12, 59
Mannitate	....	....	15, 384
Margarate	....	....	16, 473
Meconate	....	....	12, 430
Melanate	....	....	11, 163
Melissate	....	....	18, 152
Mellitate	....	....	10, 12
Mesaconate	....	....	10, 432
Metaphosphate	....	....	6, 149
Methybinetrosalicylate	....	....	12, 318
Methylbithionate	....	....	12, 489
Molybdate	....	....	6, 183
Monochloracetate	....	....	12, 539
Mucate	....	....	11, 509
Mycomelate	....	....	10, 183
Myristate	....	....	16, 214
Naphthionate	....	....	14, 114
Naphthionate with Ammonia	....	....	14, 115
Nitranisate	....	....	13, 139
Nitrate	....	....	6, 168, 170
Nitrate with Alkarsin	....	....	9, 325
„ with Asparagine	....	....	10, 248
„ with Caffeine	....	....	13, 232
„ with Cyanide of Mercury	....	....	8, 33
„ with Lophine	....	....	12, 203
„ with Melaniline	....	....	11, 354
„ with Nicotine	....	....	14, 229
„ with Quinidine	....	....	17, 300
„ reaction of, with Tan- nic acid	....	....	15, 471
„ compounds of Urea with	....	....	7, 374
„ decomposition of Urea by	....	....	7, 369
Nitrobenzoate	....	....	12, 127
Nitrocacodylate	....	....	9, 332
Nitrocapyrylate	....	....	13, 218
Nitrocinnamate	....	....	13, 301
Nitrococussate	....	....	13, 27
Nitrofrangulate	....	....	16, 79
Nitrohippurate	....	....	12, 121
Nitrophthalate	....	....	13, 29
Nitrosopelargonate	....	....	13, 372
Nitrosalicylate	....	....	12, 311
Nitrotoluylate	....	....	13, 23
Œnanthate	....	....	12, 456
Œnanthylate....	....	....	12, 453
Oleate	....	....	17, 72
Opianate	....	....	14, 429
Osmiamate	....	....	6, 422
Oxalate	....	....	9, 169 ; 13, 528
Oxanilate	....	....	11, 312
Oxatolylate	....	....	17, 184

## Silver: Oxysalts:

Oxurate	....	....	10, 171
Oxycuminate	....	....	14, 152
Oxyxanthate	....	....	8, 465
Palmitate	....	....	16, 363
Pectate	....	....	15, 409
Pelargonate	....	....	13, 371
Pentathionate	....	....	6, 153
Perchlorate	....	....	6, 167
Periodate	....	....	6, 158
Permanganate	....	....	6, 186
Phloretate	....	....	13, 312
Phosphates	....	....	6, 148
Phosphates, Fleitmann and Henneberg's	....	....	6, 141
Phthlate	....	....	13, 13
Picramate	....	....	11, 245
Picrate	....	....	11, 227
Pimelate	....	....	12, 465
Piperate	....	....	15, 11
Pipitzahoate	....	....	16, 265
Propionate	....	9, 407; 10,	555
Purpurate	....	....	10, 199
Pyromeconate	....	....	10, 443
Pyromellitate	....	....	10, 16
Pyromucate	....	....	10, 385
Pyrophosphate	....	....	6, 149
Pyrotartrate	....	....	11, 99
Racemate	....	....	10, 360
Racemovinate	....	....	10, 365
Rhodizionate	....	....	10, 403
Ricinelaïdate	....	....	17, 137
Ricinoleate	....	....	17, 134
Roccellate	....	....	16, 477
Rubiaccate	....	....	16, 52
Rubianate	....	....	16, 41
Saccharate	....	....	11, 522
Salicylamate	....	....	12, 322
Salicylate	....	....	12, 254
Salicylite	....	....	12, 244
Santalate	....	....	16, 261
Sarcocollate	....	....	11, 501
Sebate	....	....	14, 498
Seleniate	....	....	6, 157
Selenite	....	....	6, 156
Stearate	....	....	17, 112
Stilbesate	....	....	12, 181
Styphnate	....	....	11, 235
Suberate	....	....	13, 212
Succinate	....	....	10, 128
Sulphacetate	....	....	8, 437
Sulphanilate	....	....	11, 298
Sulphanisate	....	....	13, 129
Sulphate	....	....	6, 154
Sulphite	....	....	6, 153
Sulphobenzoate	....	....	12, 55
Sulphocamphorate	....	....	13, 385
Sulphocinnamate	....	....	13, 280
Sulphocymenate	....	....	14, 191

## Silver: Oxysalts:

Sulphosalicylate	....	....	12, 281
Sulphosomethylate	....	....	7, 301
Sulphosuccinate	....	....	10, 132
Sulphovinate	....	....	8, 428
Tantalate	....	....	6, 182
Tartrate	....	....	10, 325
Tartromethylate	....	....	10, 339
Tartronate	....	....	10, 345
Tartrovinat	....	....	10, 343
Tellurate	....	....	6, 193
Tellurite	....	....	6, 193
Terchloracetate	....	....	9, 212
Terchlorosulphosomethylate	....	....	7, 353
Terebentilate	....	....	13, 119
Terebilate	....	....	12, 469
Terephthalate	....	....	13, 14
Tetrathionate	....	....	6, 153
Thiacetate	....	....	13, 449
Toluylate	....	....	13, 9
Trigenate	....	....	9, 312
Triphosphate	....	....	6, 148
Trithionate	....	....	6, 153
Tungstate	....	....	6, 182
Uranate	....	....	6, 186
Uroxanate	....	....	10, 479
Valerate	....	....	11, 36
Vanadate	....	....	6, 183
Veratrate	....	....	13, 355
Vulpate	....	....	17, 151
Xanthate	....	....	8, 461
Silver Paracyanide	....	....	11, 373
„ Peroxide ?	....	....	6, 145
„ Persulphomolybdate	....	....	6, 183
„ Phosphide	....	....	6, 147
„ Platinoecyanide with Ammonia	....	....	8, 58
„ Platinoecyanide and Platinidcyanide	....	....	8, 58
„ precipitation of, in the metallic state	....	6, 141,	428
„ preparation of	....	....	6, 133
„ properties of	....	....	6, 137
„ Protochloride	....	....	6, 162
„ Protoselenide	....	....	6, 155
„ Protoxide	....	....	6, 139
„ purification of	....	....	6, 135
„ -purple	....	....	6, 194
„ -saltpetre	....	....	6, 170
„ -salts	....	....	6, 140
„ -salts, action of iodide of ethyl on	....	....	13, 451
„ -salts, decomposition of, by light	....	....	1, 172
„ -salts, solubility of, in alcohol	....	....	7, 272
„ Selenocyanide	....	....	8, 125
„ separation of, from argentiferous lead by	....	....	



fractional crystallisa- tion ....	6, 133	Silver and Iridium, alloy ....	6, 392
Silver, separation of, from the sulphide by the action of nascent hydrogen ....	6, 134	„ and Iridium, chloride ....	6, 392
„ spitting of ....	6, 138	„ and Iron, alloy ....	6, 195
„ Suboxide ....	6, 136	„ and Iron, carbide ....	6, 196
„ Suboxide, stannate of ....	6, 194	„ and Iron, sulphide ....	6, 196
„ Sulphantimoniate ....	6, 191	„ and Lead, alloy ....	6, 194
„ Sulphantimonite ....	6, 189	„ and Lead, cyanurate ....	9, 458
„ Sulpharseniate ....	6, 188	„ and Lead, hyposulphite....	6, 195
„ Sulpharsenite ....	6, 188	„ and Lead, oxide ....	6, 195
„ Sulphide ....	6, 151	„ and Lead, sulphide ....	6, 195
„ Sulphocarbonate ....	6, 154	„ Lead, and Antimony, sul- phide ....	6, 195
„ Sulphocyanide 8, 97; 12, 560		„ and Mercury, nitrate ....	6, 199
„ Sulphomolybdate ....	6, 183	„ and Molybdenum, alloy ....	6, 183
„ Sulphophosphate ....	6, 155	„ and Palladium, alloy ....	6, 357
„ Sulphophosphite ....	6, 155	„ and Phosphorus, sul- phide ....	6, 155
„ Sulphotellurite ....	6, 193	„ and Platinum, alloy ....	6, 339
„ Sulphotungstate ....	6, 183	„ and Potassium, alloy ....	6, 177
„ Telluride ....	6, 192	„ and Potassium, carbo- nate ....	6, 178
„ Thiocyanide ....	8, 115	„ and Potassium, chloride ....	6, 179
„ -vitriol ....	6, 170	„ and Potassium, cyanurate ....	9, 458
„ and Allyl, nitrate ....	9, 364	„ and Potassium, hyposul- phite ....	6, 178
„ and Ammonium, chlori- satide ....	13, 74	„ and Potassium, iodide ....	6, 178
„ and Ammonium, chlo- ride ....	6, 176	„ and Potassium, mellitate 10, 12	
„ and Ammonium, cyanu- rate ....	9, 457	„ and Potassium, nitrate ....	6, 179
„ and Ammonium, hypo- sulphite ....	6, 173	„ and Potassium, sulphate ....	6, 178
„ and Ammonium, sulphite ....	6, 174	„ and Potassium, sulphide ....	6, 178
„ Antimony, and Potas- sium, alloy ....	6, 192	„ and Potassium, sulphite ....	6, 178
„ and Barium, alloy ....	6, 181	„ and Potassium, sulpho- cyanide ....	8, 97
„ and Barium, chloride ....	6, 181	„ and Quinine, nitrate ....	17, 285
„ and Barium, nitrite ....	6, 181	„ and Rhodium, alloy ....	6, 368
„ and Berberine, hyposul- phite ....	17, 193	„ and Silicium, alloy ....	6, 182
„ and Calcium, chelidonate 12, 421		„ and Silicium, carbide ....	6, 182
„ and Calcium, chloride ....	6, 182	„ and Silicium, fluoride ....	6, 182
„ and Calcium, citrate .. 11, 461		„ and Sodium, chloride ....	6, 180
„ and Calcium, hyposul- phite ....	6, 181	„ and Sodium, hyposul- phite ....	6, 179
„ and Copper, alloy ....	7, 197	„ and Sodium, metaphos- phate ....	6, 179
„ and Copper, selenide ....	6, 197	„ and Sodium, nitrite ....	6, 181
„ and Copper, sulphide ....	6, 197	„ and Sodium, sulphite ....	6, 180
„ and Ethyl, cyanide .... 13, 458		„ and Strontium, hyposul- phite ....	6, 181
„ Copper, and Gold, alloys ....	6, 251	„ and Tellurium, chloride....	6, 193
„ and Gold, alloy....	6, 247	„ and Theobromine, nitrate 12, 473	
„ and Gold, amalgam ....	6, 251	„ and Tin, alloy ....	6, 194
„ and Gold, separation ....	6, 201	„ and Tungsten, alloy ....	6, 182
„ and Gold, telluride ....	6, 250	„ and Uranium, acetate ....	8, 333
„ Gold, and Palladium, alloy ....	6, 358	„ and Zinc, alloy ....	6, 193
„ and Guanine, nitrate .... 10, 483		Simple galvanic circuit with two metals and one liquid....	1, 341
„ and Hydrogen, aqueous chloride ....	6, 166	„ substances, atomic weights of ....	1, 43
		„ trough or cell apparatus, galvanic ....	1, 425

Sinapate of Baryta ....	14, 521	Soda, Amylosulphate ....	11, 56
„ Potash ....	14, 521	„ Amylotartrate ....	11, 81
Sinapic acid ....	14, 520	„ Anchoate ....	13, 375
Sinapine ....	14, 523	„ Angelate ....	10, 415
„ Chloroplatinate ....	14, 527	„ Antimoniate ....	4, 382
„ Hydrochlorate ....	14, 526	„ Antimonite ....	4, 382
„ Hydrosulphocyanate ....	14, 527	„ with Antimonic oxide ....	4, 382
„ Nitrate ....	14, 526	„ Apocrenate ....	17, 470
„ Sulphates ....	14, 526	„ Arseniates ....	4, 295
Sinapoline ....	10, 39	„ Arsenite ....	4, 295
„ Simons's ....	17, 553	„ artificial ....	3, 79
Sinapolic acid ....	17, 552	„ Aspartate....	10, 234
Sincaline ....	11, 115; 14, 522	„ Aurate with Chloride of	
Sinethylamine ....	10, 65	sodium ....	6, 233
Sinnamine ....	10, 63	„ Azelaate ....	17, 81
Sipeerine ....	17, 173	„ Benate ....	17, 559
Six-carbon compounds....	9, 363	„ Benzoate ....	12, 39
Six-fifths Silicate of Ferrous		„ Benzoglycolate ....	12, 66
oxide ....	5, 280	„ Betuloretate ....	17, 404
„ Silicate of Magnesia		„ Biacetate ....	8, 300
and Lime ....	3, 405	„ Biniodate ....	3, 108
Sixteen-basic Arseniate of Ferric		„ Binitroethylate ....	12, 557
oxide ....	5, 307	„ Binitromethylate....	12, 493
Skin, animal, combination of, with		„ Binitrosalicylate ....	12, 316
tannic acid ....	15, 473	„ Bisulphite with Anisylous	
Skorodite ....	5, 306	acid ....	13, 122
Slow combustion of organic com-		„ Bisulphite with Bitter	
pounds ....	7, 84	Almond oil ....	12, 27
Smaltine ....	5, 348	„ Bisulphite with Cuminol ....	14, 147
Smilacin ....	15, 349	„ Bisulphite with Glyoxal ....	12, 505
<i>Smilax China</i> , preparation of		„ Bisulphite with Nitro-	
Pariglin from the bark of ....	16, 99	benzaldide ....	12, 121
Smoking of meat ....	7, 117	„ Bisulphite with Cœnanthol	12, 449
Snails, mucin of ....	18, 340	„ Bisulphite with Rue-oil....	14, 493
Snow-water, purity of ....	2, 60	„ Bisulphite with Salicylous	
Soap ....	17, 69	acid ....	12, 242
„ hard ....	17, 70, 108	„ Bisulphite with Valeral-	
„ soft ....	17, 71, 109	dide ....	11, 19
Soap-acids ....	7, 229	„ Borates ....	3, 87
„ -boiler's ley ....	3, 76	„ Bromacetate ....	12, 533
„ -stone, English ....	3, 420	„ Bromate ....	3, 110
Soda ....	74	„ Butyrate ....	10, 554
„ syn. with carbonate of		„ Butyrate ....	10, 85
soda ....	3, 78	„ Cacodylate ....	9, 330
„ Acetates ....	8, 299	„ Camphorate ....	14, 459
„ Acetate with Mercuric		„ Caprate ....	14, 487
Cyanide ....	8, 333	„ Caproate ....	11, 416
„ Acetopropionate ....	9, 405	„ Carbolate....	11, 151
„ Aconitates ....	11, 406	„ Carbonates ....	3, 77
„ Acrylate ....	9, 371	„ Carbonate with Silicate of	
„ action of, on organic com-		Ferric oxide ....	5, 283
pounds ....	13, 385	„ Chelidonate ....	12, 416
„ Albuminate ....	18, 306	„ caustic ....	3, 75
„ Alizarite ....	14, 139	„ Chlorate ....	3, 114
„ Alloxanate ....	10, 163	„ Chlorite ....	3, 114
„ -alum ....	3, 325	„ Chlorobenzoate ....	12, 114
„ Aluminate ....	3, 325	„ Chlorosulphosomethylate....	7, 302
„ Amidobenzoate ....	12, 145	„ Cholate ....	18, 50
„ Amylomalate ....	11, 80	„ Chromate ....	4, 151

Soda-chrome-alum ....	4, 152	Soda, Leucate ....	15, 60
„ Chromite ....	4, 151	„ -ley ....	3, 76
„ Chrysammate ....	12, 4	„ -lime, use of, for estimation	
„ Cimicate ....	16, 285	of nitrogen in organic	
„ Cinnamate ....	13, 274	compounds ....	7, 87
„ Citraconate ....	10, 420	„ Linoleate....	16, 307
„ Citrates ....	11, 447	„ Lithofellate ....	17, 377
„ Cobaltite ....	5, 344	„ -liver of Sulphur ....	3, 97
„ Comenate ....	11, 385	„ with Magnesia? ....	3, 251
„ Crenate ....	17, 467	„ Malate ....	10, 214
„ Croconate ....	10, 392	„ Maleates ....	8, 154
„ with Cupric oxide....	5, 461	„ Manganate ....	4, 238
„ Cyanate ....	8, 67	„ Margarate ....	16, 473
„ Cyanurate ....	9, 453	„ Meconate ....	12, 427
„ Di-hypoiodite ....	3, 106	„ Mellitate ....	10, 6
„ Elaidate ....	17, 77	„ Mesaconate ....	10, 429
„ Ellagate ....	16, 188	„ Mesitylo-phosphate ....	9, 29
„ Erucate ....	17, 551	„ Mesotype....	3, 437
„ Ethionate ....	8, 434	„ Metaphosphate ....	3, 95
„ Ethylophosphate ....	8, 400	„ Metatartrate ....	10, 328
„ Ethylosulphite ....	8, 409	„ Methylsalicylate ....	12, 257
„ Ethylsulphobenzoate ....	12, 64	„ Molybdate ....	4, 73
„ Ethyltrithionate ....	12, 514	„ Monoarseniate ....	4, 297
„ Eugenate ....	14, 205	„ Mono-iodate ....	3, 107
„ -felspar ....	3, 443	„ Mucate ....	11, 506
„ Ferrite ....	5, 271	„ Myristate ....	16, 212
„ Filicate ....	16, 127	„ Naphthionate ....	14, 112
„ Formiate ....	7, 277	„ native ....	3, 78
„ Fulminurate ....	10, 560	„ Niccolate....	5, 385
„ Fumarate ....	10, 26	„ Niobiate ....	4, 19
„ Gaedinate ....	16, 320	„ Nitranisate ....	13, 138, 586
„ Gentianates ....	16, 180	„ Nitrate ....	3, 117
„ with Glucina ....	3, 302	„ „ compound of, with	
„ Glycocholate ....	18, 59	urea ....	7, 372
„ Glycocholonate ....	18, 63	„ Nitrite ....	3, 116
„ Gallate ....	12, 405	„ Nitrobenzoate ....	12, 124
„ Guaiaretate ....	17, 244	„ Nitrohippurate ....	12, 131
„ with Guanine ....	10, 482	„ Nitrosalicylate ....	12, 309
„ -hauyne ....	3, 347	„ Nitrosopelargonate ....	13, 372
„ Hippurate ....	12, 76	„ Nitrotoluylate ....	13, 22
„ Hydrate ....	12, 78	„ Oenanthate ....	12, 456
„ Hydrate, electrolysis of ....	1, 458	„ Oleate ....	17, 70
„ Hydriodite ....	3, 106	„ Osmiamate ....	6, 420
„ Hydrochlorate and Stannite	5, 99	„ Oxalates....	9, 127; 13, 515
„ Hyoglycocholate ....	18, 104	„ Oxamate ....	13, 536
„ Hypobromite ....	3, 110	„ Palmitate ....	16, 461
„ Hypochlorite ....	3, 113	„ Pectate ....	15, 407
„ Hypophosphite ....	3, 90	„ Pelopiate ....	4, 23
„ Hyposulphate ....	3, 100	„ Pentathionate ....	3, 99
„ Hyposulphite ....	3, 98	„ Perchlorate ....	3, 115
„ Inosate ....	11, 120	„ Periodate....	3, 109
„ Iodate ....	3, 106	„ Permanganate ....	4, 238
„ Iodide ....	3, 105	„ Phloretate ....	13, 310
„ Iodite ....	3, 106	„ Phosphates ....	3, 90
„ Isobiglycoethylenate ....	15, 234	„ Phosphite....	3, 90
„ Itaconate ....	10, 426	„ Phthalate....	13, 12
„ Kinate ....	16, 228	„ Picrate ....	11, 211
„ Lactate ....	11, 481	„ Platinate ....	6, 324
„ Laurate ....	15, 47	„ Platinité ....	6, 323



Soda Plumbate....	....	5, 162	Soda Thiacetate ....	....	13, 448
„ Plumbite ....	....	5, 162	„ Thionaphthamate ....	....	14, 116
„ Propionate ....	9, 405 ; 10, 553		„ Thiotolamate ....	....	12, 344
„ Purpurate ....	....	10, 198	„ Titanates ....	....	3, 485
„ Pyrogallate ....	....	11, 401	„ -tourmaline ....	....	3, 454
„ Pyromucate ....	....	10, 583	„ Trithionate ....	....	3, 99
„ Pyrophosphate ....	....	3, 93	„ Tungstate ....	....	4, 40
„ Pyrotartrate ....	....	11, 89	„ Tungstate with Fluoride of		
„ Racemate ....	....	10, 350	Tungsten and Sodium ....	4, 47	
„ Racemovinate ....	....	10, 364	„ Turpetholate ....	....	17, 455
„ Rhodiate ....	....	6, 367	„ Uranate ....	....	4, 189
„ Rhodizionate ....	....	10, 401	„ Urate ....	....	10, 471
„ Ricinelaideate ....	....	17, 136	„ Usnate ....	....	17, 51
„ Roccellate ....	....	16, 476	„ Valerate ....	....	11, 31
„ Rubianate ....	....	16, 41	„ Vanadiates ....	....	4, 100
„ Saccharates ....	....	11, 517	„ Xanthate ....	....	8, 456
„ Salicylite....	....	12, 241	„ with Zinc-oxide ....	....	5, 44
„ Salts ....	....	3, 77	„ and Alumina, oxalate ....	9, 135	
„ Santalate....	....	16, 260	„ and Alumina, pyrophos-		
„ Sebate ....	....	14, 498	phate ....	....	3, 325
„ Seleniate ....	....	3, 105	„ and Alumina, sulphate ....	3, 325	
„ Selenites ....	....	3, 104	„ and Ammonia, antitartrate	10, 367	
„ Silicates ....	....	3, 375	„ and Ammonia, arseniate....	4, 298	
„ Silicate with Silicate of			„ and Ammonia, citrate ....	11, 448	
Alumina ....	....	3, 420	„ and Ammonia, phosphate....	3, 118	
„ -soap ....	....	17, 70	„ and Ammonia, pyrophos-		
„ solution of ....	....	3, 76	phate ....	....	3, 118
„ -spodumene ....	....	3, 444	„ and Ammonia, racemate ....	10, 351	
„ Stannates ....	....	5, 98	„ and Ammonia, sulphate ....	3, 119	
„ Stearate ....	....	17, 109	„ and Ammonia, tartrate ....	10, 282	
„ Stannite ....	....	5, 98	„ Ammonia, and Manganous		
„ Styphnate ....	....	11, 232	oxide, pyrophosphate ....	4, 240	
„ Suberate ....	....	13, 208	„ and Arsenious acid, race-		
„ Succinate ...	....	10, 117	mate ....	....	10, 356
„ Sulphacetate ....	....	8, 300	„ and Arsenious acid, tartrate	10, 296	
„ Sulphanilate ....	....	11, 298	„ and Auric oxide, hyposul-		
„ Sulphate ....	....	3, 100	phite ....	....	6, 232
„ Sulphate with Carbonate of			„ and Aurous oxide, hyposul-		
Lime ....	....	3, 217	phite ....	....	6, 231
„ Sulphindigotate ....	....	13, 63	„ and Aurous oxide, sulphite	6, 232	
„ Sulphite ....	....	3, 99	„ and Baryta, metaphosphate	3, 165	
„ Sulphocymenate ....	....	14, 189	„ and Baryta, pyrophosphate	3, 164	
„ Sulphophloretate ....	....	13, 313	„ and Baryta, tartrate ....	10, 286	
„ Sulphosalicylate ....	12, 277 ; 278		„ and Bismuth-oxide, bismu-		
„ Sulphovinate ....	....	8, 421	thate ....	....	4, 447
„ Sylvate ....	....	17, 321	„ and Boracic acid, tartrate	10, 281	
„ Tannate ....	....	15, 465	„ and Cerous oxide, sulphate	3, 273	
„ Tantalate....	....	4, 10	„ and Chromic oxide, sulphate	4, 152	
„ Tartrate ...	....	10, 280	„ and Cobalt-oxide, carbonate	5, 344	
„ Tartrelate ....	....	10, 334	„ and Cobalt-oxide, metaphos-		
„ Tartromethylate ....	....	10, 339	phate ....	....	5, 344
„ Tartrovinate ....	....	10, 342	„ and Cupric oxide, carbonate	5, 461	
„ Taurochenocholate ....	....	18, 132	„ and Cupric oxide, sulphate	5, 462	
„ Taurocholate ....	....	18, 67	„ Cuprous oxide, hyposulphite	5, 461	
„ Tellurates ....	....	4, 421	„ and Ferric oxide, Carbonate	5, 272	
„ Telluride ....	....	4, 420	„ and Ferric oxide, pyrophos-		
„ Tellurites....	....	4, 420	phate ....	....	5, 272
„ Terchlorosulphosomethylate	7, 353		„ and Ferric oxide, basic sul-		
„ Tetrathionate ....	....	3, 99	phate ....	....	5, 273

- Soda and Ferrous oxide, pyrophosphate .... 5, 272  
 „ and Glucina, carbonate .... 3, 302  
 „ and Lead-oxide, carbonate 5, 162  
 „ and Lead-oxide, hyposulphite .... 5, 162  
 „ and Lead-oxide, sulphate.... 5, 163  
 „ and Lime, lactate.... 11, 485  
 „ and Lime, malate.... 10, 219  
 „ and Lime, silicate .... 3, 394  
 „ and Lime, sulphate ... 3, 217  
 „ and Lime, tartrate .... 10, 290  
 „ and Lithia, phosphate .... 3, 132  
 „ and Lithia, tartrate .... 10, 285  
 „ and Magnesia, borate .... 3, 251  
 „ and Magnesia, carbonate.... 3, 251  
 „ and Magnesia, metaphosphate .... 3, 252  
 „ and Magnesia, pyrophosphate .... 3, 252  
 „ and Magnesia, sulphate .... 3, 253  
 „ and Magnesia, tartrate .... 10, 291  
 „ and Manganous oxide, sulphate .... 4, 239  
 „ and Mercuric oxide, hyposulphite .... 6, 103  
 „ and Molybdic oxide, carbonate .... 4, 73  
 „ and Molybdic oxide, hydrofluante .... 4, 74  
 „ and Molybdous oxide, hydrofluante .... 4, 74  
 „ and Nickel-oxide, metaphosphate .... 5, 385  
 „ and Nitric oxide, sulphite 3, 118  
 „ and Palladious oxide, nitrite 6, 355  
 „ and Platinic oxide, nitrate 6, 326  
 „ and Platinic oxide, sulphate 6, 325  
 „ and Platinous oxide, sulphite 6, 324  
 „ and Potash, antitartrate.... 10, 367  
 „ and Potash, arseniate .... 4, 299  
 „ and Potash, carbonate .... 3, 119  
 „ and Potash, chromate .... 4, 152  
 „ and Potash, insolinate .... 13, 320  
 „ and Potash, maleate ? .... 8, 155  
 „ and Potash, metatartrate 10, 328  
 „ and Potash, nitrate .... 3, 120  
 „ and Potash, oxalate ? .... 9, 127  
 „ and Potash, phosphate .... 3, 119  
 „ and Potash, pyrophosphate .... 3, 120  
 „ and Potash, racemate .... 10, 351  
 „ and Potash, sulphate .... 3, 120  
 „ and Potash, sulphochromate .... 4, 152  
 „ and Potash, tartrate .... 10, 282  
 „ Potash, and Boracic acid, racemate .... 10, 352  
 „ and Rhodic oxide, acetate 8, 334  
 Soda and Rhodic oxide, nitrate 6, 367  
 „ and Silica, carbonate 3, 386  
 „ and Silver-oxide, hyposulphite .... 6, 179  
 „ and Silver-oxide, metaphosphate .... 6, 179  
 „ and Silver-oxide, nitrite 6, 181  
 „ and Silver-oxide, sulphite 6, 180  
 „ and Strontia, tartrate 10, 287  
 „ Titanic oxide, carbonate 3, 486  
 „ and Tungstous oxide, tungstate .... 4, 46  
 „ and Uranic oxide, acetate 8, 307  
 „ and Uranic oxide, arseniate .... 4, 313  
 „ and Uranic oxide, carbonate .... 4, 189  
 „ and Uranic oxide, pyrophosphate .... 4, 190  
 „ and Vanadic acid, phosphate .... 4, 100  
 „ and Yttria, carbonate .... 3, 293  
 „ and Zinc-oxide, carbonate 5, 45  
 „ and Zinc-oxide, sulphate 5, 45  
 Sodolite .... 3, 437, 461  
 Sodio-antimonic oxalate 10, 533; 12, 523  
 „ -antimonic Tartrate .... 10, 307  
 „ -chromic Oxalate ... 9, 141  
 „ -cupric Oxalate .... 9, 166  
 „ -cupric Racemate.... 10, 360  
 „ -cupric Tartrate .... 10, 321  
 „ -ferric Citrate .... 11, 458  
 „ -ferric Oxalate .... 9, 159  
 „ -platinous Oxalate .... 13, 529  
 „ -stannic Oxalate .... 9, 154  
 Sodium.... 3, 73  
 „ action of, on organic compounds .... 7, 145  
 „ Alloys.... 3, 121  
 „ Amalgam .... 6, 103  
 „ Amide .... 3, 116  
 „ Antimonide .... 4, 382  
 „ Arsenide .... 4, 264  
 „ Aurosulphide .... 6, 230  
 „ Bismuthide .... 4, 447  
 „ Biomide .... 3, 109  
 „ Bromide with Cyanide of Mercury .... 8, 221  
 „ Bromo-aurate.... 6, 232  
 „ Bromoplatinate .... 6, 326  
 „ Chloride .... 3, 110  
 „ Chloride, preparation of carbonate of soda from 3, 79  
 „ Chloride with Aurate of Soda .... 6, 233  
 „ Chloride with Cane-sugar ... 15, 283  
 „ Chloride, chromate of... 4, 152

Sodium, Chloride with Cyanide of				Sodium Sulphomolybdate	....	4,	74
Mercury	....	8,	21	Sulphoplatinate	....	6,	324
Chloride with Ethyl-				Sulphosinapate	....	10,	35
chloride of Platinum....		8,	392	Sulphostannate	....	5,	98
Chloride with Glucose		15,	325	Sulphotellurite	....	4,	422
Chloride, sulphate of	....	3,	115	Sulphotungstate	....	4,	42
Chloride with Urea	....	7,	372	Sulphotungstite	....	4,	42
Chloriridiate	....	6,	391	Thiocyanide	....	8,	114
Chloro-aurate	....	6,	232	and Aluminum, Chloride		3,	326
Chloropalladite	....	6,	355	Aluminium, Fluo-			
Chloroplatinate	....	6,	326	ride	....	3,	326
Chloroplatinite	....	6,	326	Ammonium, Sul-			
Chlororhodiate	....	6,	367	pharsenate	....	4,	298
Chlorostannate	....	5,	98	Antimony, Chlo-			
Cobaltidcyanide	....	7,	494	ride	....	4,	387
-compound, olive-coloured		3,	116	Bismuth, Chloride		4,	448
Cuprocyanide	....	8,	7	Cadmium, Chloride		5,	64
Cyanide	....	7,	417	Cadmium, Oxalate		13,	326
-ethyl	....	13,	491	Carbon, Sulphide		3,	104
Ethylate	....	13,	420	Copper, Chloride....		5,	462
Ferricyanide	....	7,	478	Gold, Sulphide	....	6,	230
Ferrocyanide	....	7,	478	Hydrogen, Fluo-			
Fluoboride	....	3,	116	ride	....	3,	116
Fluopalladite	....	6,	355	Hydrogen, Sul-			
Fluoplatinate	....	6,	326	phide	....	3,	97
Fluoride	....	3,	115	Iridium, Chlorides		6,	390
Fluoride with Silica	....	3,	387	Iron, Sulphide	....	5,	272
Fluoride with Sesqui-				Lead, alloy	....	5,	162
fluoride of Chromium		4,	152	Lead, Bromide	....	5,	163
Fluotellurate	....	4,	422	Lead, Chloride	....	5,	163
Hyposulpharsenite	....	4,	297	Lead, Iodide	....	5,	163
Iodide....	....	3,	105	Lead, Sulphide	....	5,	162
Iodide, compounds of,				Magnesium, Chlo-			
with Cyanide of Mer-				ride	....	3,	253
cury	....	8,	21	Manganese, Fluo-			
Iodo-aurate	....	6,	232	ride	....	4,	240
Iodoplatinate	....	6,	325	Manganese, Sul-			
Iodostannite	....	5,	98	phide	....	4,	239
Iodotellurate	....	4,	422	Mercury, Bromide		6,	104
Lichenate	....	16,	196	Mercury, Chloride		6,	104
Mellonide	....	9,	393	Mercury, Iodide	....	6,	104
Mercaptide	....	8,	345	Palladium, Melli-			
Monosulphide	....	3,	96	tate	....	10,	13
Nitroprusside	....	8,	130	Platinum, alloy	....	6,	323
Perbromide, hydrated....		3,	110	Potassium, alloy....		3,	119
Peroxide	....	3,	77	Potassium, amal-			
Phosphide	....	3,	89	gam	....	6,	105
Platinocyanide	8, 52 ; 10,	507		Potassium, Ferri-			
Platino-platinidcyanide		8,	52	cyanide....	....	7,	479
-salts, solubility of, in				Potassium, Ferro-			
alcohol	....	8,	266	cyanide....	....	10,	503
Selenocyanide	....	8,	123	Potassium, Sul-			
Suboxide	....	8,	74	pharsenate	....	4,	299
Sulphantimoniate	....	4,	384	Ruthenium, Chlo-			
Sulphantimonite	....	4,	383	ride	....	6,	404
Sulpharsenate	....	4,	297	Silicium, Fluoride		3,	386
Sulpharsenite	....	4,	297	Silver, Chloride	....	6,	180
Sulphides	....	4,	96	Tantalum, Fluo-			
Sulphocyanide....	....	8,	83	ride	....	4,	11



- Sodium and Tin, alloy .... 5, 98  
 „ Titanium, Fluoride 3, 486  
 „ Vanadium, Fluoride 4, 101  
 „ Zinc, alloy .... 5, 44  
 „ Zinc, Cyanide .... 7, 425  
 „ Zinc, Iodide .... 5, 45  
 „ Zinc, Lactate .... 11, 488  
 Soft parts of plants, phenomena exhibited by, during fermentation .... 7, 101  
 Soil, vegetable, formation of humus in .... 17, 458  
 Solaneic acid, *see* Potato-fat.  
 Solanicine .... 18, 88  
 Solanidine .... 18, 85  
 Solanine .... 15, 349; 18, 90  
 „ reactions of, with potassium iodide, potash chromate, phosphomolybdic acid, stannous chloride, and cupric sulphate .... 18, 96  
 „ salts .... 18, 95  
 Solanostearic acid, *see* Potato-fat.  
 Solar light, composite nature of .... 1, 180  
 „ rays, electricity of ? .... 1, 319  
 Solder .... 5, 180  
 Solid Bromide of Carbon ... 7, 341  
 „ compounds, table of specific heats of .... 1, 244  
 „ dielectrics .... 1, 312  
 „ natural fats .... 16, 385  
 Solidification of gases .... 1, 285  
 „ gases produced by the affinity of ponderable bodies for the ponderable base of the gas .... 1, 289  
 Solids, adhesion between .... 1, 30  
 „ cohesion of .... 1, 7  
 „ expansion of, by heat .... 1, 232  
 „ heat-condensing powers of .... 1, 221  
 „ solution of, in water .... 2, 69  
 „ and liquids, adhesion between .... 1, 27  
 „ and liquids, relations between the specific gravities and atomic weights of .... 1, 54, 68  
 Soluble glass .... 3, 371  
 „ „ containing potash and soda .... 3, 387  
*Solutio Mercurii calide parata* 6, 75  
 „ „ *frigide parata* 6, 75  
 Solution, compounds formed by 1, 86  
 Solution, simultaneous, of two salts in water .... 2, 71  
 Solutions, alcoholic .... 8, 257  
 „ aqueous .... 2, 65  
 „ aqueous, boiling points of .... 1, 269, 270  
 „ aqueous, maximum density of .... 1, 225  
 „ saccharine, circular polarisation of .... 15, 244  
 Soot, animal matter of .... 15, 159  
 „ of burning wood .... 7, 85  
 Sorbite .... 15, 350  
*Sorghum saccharatum*, preparation of cane-sugar from .... 15, 242  
 Sorrel, salt of .... 9, 125  
 „ „ preparation of oxalic acid from .... 9, 112  
 Soubeiran's so-called Mercurous salt .... 6, 96  
 Space, temperature of .... 1, 221  
 Spaniolitmin .... 12, 367  
 Spanish Pepper, resins of .... 17, 450  
 Spar, bitter .... 3, 253  
 „ heavy .... 3, 151  
 „ tabular .... 3, 388  
 Sparteine .... 13, 152; 16, 282  
 Spathic Iron-ore .... 5, 219  
 Special Chemistry .... 1, 160  
 Specific gravities and atomic weights of compounds, relations between 1, 66, 68  
 „ gravities and atomic weights of elements, relations between .... 1, 52  
 „ gravities of inorganic gases.... 1, 279, 280  
 „ gravities of organic compounds .... 7, 46  
 „ gravities of organic compounds in the gaseous state.... 7, 52  
 „ heat .... 1, 238  
 „ heat of atoms .... 1, 243  
 „ heat of the atoms of compounds .... 1, 248  
 „ heat of compounds, variation of, according to density .... 1, 247  
 „ heat of gases, table of 1, 239  
 „ heats of liquids, according to Person .... 1, 255  
 „ heats of liquids, according to Regnault .... 1, 247  
 „ heats of liquids, according to Favre and Silbermann .... 1, 248  
 „ heats of liquid and solid compounds, table of.... 1, 244

Specific heats of liquid and solid elements ....	1, 241	<i>Spiritus nitri fumans</i> ....	2, 402
„ heats of metals (Regnault) ....	1, 242	„ <i>sulphuratus Beguini</i> ....	2, 454
„ rotatory power ....	15, 245	„ <i>sulfuris per campanum</i> ....	2, 171
„ volumes, <i>see</i> Volume.		„ <i>Veneris</i> ....	8, 282
<i>Specificum purgans Paracelsi</i> ....	3, 39	„ <i>vini</i> ....	8, 194
Spectra formed by a prism of double-refracting spar, equal heating powers of the two ....	1, 166	„ <i>vitrioli coagulabilis</i> ....	2, 39
Spectrum, chemical rays of ....	1, 174	Spirol ....	11, 139
„ of heat-rays ....	1, 165	Spiroyl Bibromide ....	12, 287
„ luminous or coloured ....	1, 164	„ Bromide ....	12, 284
„ solar, heating power of different parts of ....	1, 165	„ Iodide ....	12, 283
„ thermic, discontinuity of ....	1, 166	Spitting of silver ....	6, 138
Specular Iron ....	5, 194	Spodumene ....	3, 444
Speiskobold ....	5, 348	Sponge, composition of....	18, 369
Spelter ....	5, 1	Spongin ....	18, 369
Spencer's electrotpe apparatus	1, 504	Spongy Platinum ....	6, 277
Spermaceti fat ....	16, 347	„ Platinum, effect of, in inducing combustion	2, 26
„ preparation of cetylic alcohol from ....	16, 344	Spontaneous decomposition of organic compounds ....	7, 90
„ preparation of lauric acid from ....	15, 45	„ inflammation of organic bodies....	7, 85
„ preparation of myristic acid from ....	16, 209	„ precipitation	1, 113, 135
Sperm-oil, ....	16, 321	Spruce Fir, oil of ....	16, 316
„ preparation of physetoleic acid from ....	16, 317	„ Fir, fatty oil of....	16, 316
Sphæro-siderite ....	5, 219	Spurious Sarcolite ....	3, 440
Sphene ....	3, 488	<i>Squalus maximus</i> , oil of ....	16, 322
Spheroidal state of liquids (Leidenfrost's experiment) ....	1, 277	Squill oil ....	14, 400
Spigelia bitter ....	18, 242	„ resin of ....	17, 451
Spilanthin ....	18, 242	Stable manure, formation of humus in ....	17, 458
Spindle-tree oil....	17, 98	Stag's horn, ossein in ....	18, 352
Spinellane ....	3, 456	Stahl, his phlogistic theory ....	1, 4
Spinelle ....	3, 327	Stannamyls ....	11, 129, 131
Spiræas, herbaceous, occurrence of salicin in ....	16, 431	Stannates ....	5, 76
Spiræa, oil of ....	12, 235	Stannate of Ammonia ....	5, 93
<i>Spiræa ulmaria</i> , preparation of salicylic acid from the flowers of ....	12, 247	„ Aurous oxide ? ....	6, 239
„ <i>ulmaria</i> , preparation of salicylous acid from the flowers of ....	12, 235	„ Baryta ....	5, 99
„ -yellow ....	16, 512	„ Cobalt-oxide ....	5, 354
Spirit of Alum ....	3, 322	„ Chromic oxide ? ....	5, 101
„ Copper ....	8, 282	„ Cupric oxide ....	5, 484
„ Hartshorn ....	2, 423	„ Cuprous oxide ....	5, 483
„ Pyroxylic ....	7, 258	„ Lead-oxide ....	5, 180
„ of Wine ....	8, 194	„ Lime ....	5, 100
Spirits ....	7, 168	„ Magnesia ....	5, 100
<i>Spiritus aeruginis</i> ....	8, 282	„ Manganous oxide ....	5, 102
„ <i>fumans Libavii</i> ....	5, 87	„ Mercuric oxide ....	6, 125
„ <i>nitri dulcis</i> ....	8, 218	„ Mercurous oxide ....	6, 125
		Stannates of Potash ....	5, 95
		„ Soda ....	5, 98
		Stannate of Stannic oxide, anomalous ....	5, 71
		„ Strontia ....	5, 99
		„ Suboxide of Silver....	6, 194
		„ Zinc-oxide....	5, 105
		Stannethyls ....	9, 96 ; 13, 505
		„ preparation of ....	9, 91
		„ general properties of	9, 92

Stannethyl, six-fourths....	9, 106	Stannite and Hydrochlorate of	
Stannethylum....	9, 106	Strontia ....	5, 99
Stannic Acetate ....	8, 310	Stannmethyl ....	9, 506
„ acid ...	5, 71	Stannous acetate ....	8, 310
„ acid, anomalous, hydrate		„ Arseniate ? ...	5, 102
of ....	5, 73	„ Bihydrosulphate ....	5, 80
„ acid, ordinary hydrate		„ Borate ....	5, 77
of ....	5, 74	„ Bromate ....	5, 84
„ Antimoniate ....	5, 103	„ Bromide ....	5, 84
„ Arsenite ? ....	5, 102	„ Chloride ....	5, 84
„ Biethyl ....	13, 506	„ Chloroplatinate ....	6, 335
„ Bromide ....	5, 84	„ Chromate ....	5, 102
„ Callutannate ....	15, 515	„ Citraconate ....	10, 421
„ Chloride ....	5, 88	„ Formiate ....	7, 280
„ Chloride, Hydrocyanate of	8, 149	„ Gallate ....	12, 409
„ Chloride with Nitric		„ Hydrate ....	5, 69
oxide ....	5, 93	„ Hydrobromate ....	5, 84
„ Chloride with Sulphur		„ Hydrochlorate ....	5, 85
and Phosphorus ....	5, 89	„ Hydrofluatate ....	5, 92
„ Chloride, sulphate of ....	5, 91	„ Hydrosulphate ....	5, 78
„ Chloride with Terchlo-		„ Hyposulphate ....	5, 81
ride of Phosphorus ..	5, 90	„ Hyposulphite ? ...	5, 81
„ Chromate ....	5, 102	„ Iodate ....	5, 83
„ Ethide....	13, 506	„ Iodide ....	5, 82
„ Ethylomethyl ....	13, 509	„ Lactate ....	11, 489
„ Formiate ....	7, 280	„ Nitrate ....	5, 92
„ Hydrochlorate ....	5, 88	„ Oxalate	
„ Hydrofluatate ....	5, 92	9, 152 ; 10, 534 ; 13, 526	
„ Iodate ....	5, 83	„ Oxide....	5, 68
„ Iodide....	5, 83	„ Persulphomolybdate ....	5, 101
„ Lactate ....	11, 489	„ Phosphate ....	5, 77
„ Molybdate ....	5, 101	„ Racemate ....	10, 357
„ Nitrate ....	5, 92	„ Salts ....	5, 69
„ Oxalate ....	9, 153	„ Sulphantimoniate ....	5, 104
„ Oxide ....	5, 71	„ Sulpharseniate ....	5, 103
„ Persulphomolybdate ....	5, 101	„ Sulpharsenite....	5, 102
„ Phosphite ....	5, 77	„ Sulphate ....	5, 81
„ Salts ....	5, 74	„ Sulphide ....	5, 78
„ Selenite ....	5, 82	„ Sulphite ....	5, 81
„ Sulpharseniate ....	5, 103	„ Sulphocarbonate ....	5, 82
„ Sulpharsenite ....	5, 102	„ Sulphocyanide ....	8, 87
„ Sulphate ....	5, 82	„ Sulphomolybdate ....	5, 101
„ Sulphide ....	5, 80	„ Sulphotellurite ....	5, 104
„ Sulphocarbonates ....	5, 82	„ Sulphotungstate ....	5, 101
„ Sulphomolybdate ....	5, 101	„ Tannate ....	15, 467
„ Sulphotellurite ....	5, 104	„ Tartrate ....	10, 311
„ Sulphotungstate ....	5, 101	„ Tetrathionate ....	5, 81
Stannite of Potash ....	5, 95	„ Tungstate ....	5, 100
„ Soda ....	5, 98	Stannum ....	5, 66
„ and Hydrochlorate of		Staphisagrine ....	18, 23
Ammonia ....	5, 95	Star-anise oil ....	14, 197
„ and Hydrochlorate of		Starch ....	15, 72
Baryta ..	5, 99	„ alteration of, in contact	
„ and Hydrochlorate of		with gluten or diastase	7, 98
Magnesia ....	5, 100	„ American ....	15, 77
„ and Hydrochlorate of		„ combinations of, with	
Potash ....	5, 98	acids ....	15, 100
„ and Hydrochlorate of		„ combinations of, with	
Soda ....	5, 99	bases ....	15, 100



Starch, combination of, with bro-				Starch, decomposition of, by tar-			
mine ....	15,	100		taric acid ....	15,	87	
„ combination of, with io-				„ decomposition of, by yeast	15,	92	
dine ....	15,	97		„ explosive ....	15,	106	
„ combination of, with water	15,	93		„ formation of dextroglu-			
„ composition of ....	15,	80		cose from ....	15,	306	
„ decomposition of, by acetic				„ -granules, diameters of....	15,	79	
acid (glacial) ....	15,	97		„ -granules, structure of ....	15,	78	
„ decomposition of, by am-				„ iodide of ....	15,	97	
monia ....	15,	87		„ literature of ....	15,	72	
„ decomposition of, by bi-				„ -paste ....	15,	95	
chloride of tin ....	15,	89		„ -paste, reactions of ....	15,	102	
„ decomposition of, by bro-				„ preparation of ....	15,	76	
mine ....	15,	537		„ preparation of dextrin			
„ decomposition of, by chlo-				from ....	15,	187	
ride of zinc ....	15,	89		„ preparation of dextroglu-			
„ decomposition of, by chlo-				cose from ....	15,	311	
rine ....	15,	83		„ preparation of formic acid			
„ decomposition of, by cin-				from ....	7,	272	
chona-alkaloids ....	15,	90		„ properties of ....	15,	77	
„ decomposition of, by com-				„ soluble, Béchamp's ....	15,	102	
bustion in the air ....	15,	82		„ solutions of ....	15,	101	
„ decomposition of, by dias-				„ solution, precipitation of,			
tase ....	15,	90		by tannic acid..	15,	473	
„ decomposition of, by dry				„ sources of ....	15,	73	
distillation ....	15,	81		„ specific gravity of ....	15,	79	
„ decomposition of, by fluo-				„ -sugar ....	15,	305	
ride of iron ....	15,	87		„ table of quantities of water			
„ decomposition of, by glu-				absorbed by ....	15,	95	
ten ....	15,	91		Staurolite ....	3,	411	
„ decomposition of, by				Steam, electricity of ....	1,	338	
heat ....	15,	81		„ latent heat of ....	1,	283, 284	
„ decomposition of, by hy-				„ total quantity of heat in			
drochloric acid ....	15,	86			1,	283—285	
„ decomposition of, by ni-				Stearamide ....	17,	147	
tric acid ....	15,	84		Stearanilide ....	17,	147	
„ decomposition of, by os-				Stearate of Ammonia ....	17,	107	
mic acid ....	15,	90		„ Amyl ....	17,	123	
„ decomposition of, by oxa-				„ Baryta ....	17,	110	
lic acid ....	15,	87		„ Camphyl ....	17,	125	
„ decomposition of, by oxi-				„ Capryl ....	17,	124	
dation ....	15,	82		„ Cetyl ....	17,	128	
„ decomposition of, by phos-				„ Cholesteryl....	18,	119	
phoric acid ....	15,	86		„ Copper ....	17,	112	
„ decomposition of, by heat-				„ Dulcetyl ....	17,	128	
ing with potash ....	15,	88		„ Ethyl ....	17,	115	
„ decomposition of, by				„ Ethylene ....	17,	116	
soluble Prussian blue ....	15,	90		„ Lead ....	17,	111	
„ decomposition of, by quick				„ Lime ....	17,	111	
lime ....	15,	89		„ Magnesia ....	17,	111	
„ decomposition of, by				„ Mannityl ....	17,	127	
saliva ....	15,	92		„ Mercury ....	17,	112	
„ decomposition of, by fu-				„ Methyl ....	17,	114	
sion with saltpetre and				„ Opianyl ....	17,	124	
potash-hydrate ....	15,	88		„ Orcin ....	17,	124	
„ decomposition of, by heat-				„ Pinityl ....	17,	125, 126	
ing with soda-hydrate	15,	88		„ Potash ....	17,	108	
„ decomposition of, by sul-				„ Quercetyl ....	17,	126	
phuric acid ....	15,	84		„ Silver ....	17,	112	

- Stearate of Soda .... 17, 109  
 „ Soda, electrolysis of 1, 462  
 „ Strontia .... 17, 113  
 Stearerin .... 16, 400  
 Stearic acid .... 17, 103  
 „ acid, atomic weight of .... 7, 236  
 „ acid, melting points and mode of solidification of mixtures of, with lauric, with myristic, and with palmitic acid 17, 113  
 „ acid, preparation of succinic acid by oxidation of 10, 112  
 „ anhydride .... 17, 137  
 „ and Lauric acids, melting points and solidification of mixtures of .... 17, 113  
 „ and Margaric acids, melting points and mode of solidification of mixtures of .... 17, 114  
 „ Margaric, and Oleic acids, Chevreul's method of preparing .... 16, 355  
 „ Palmitic, and Myristic acids, melting points and mode of solidification of mixtures of .... 17, 114  
 Stearidic acid .... 17, 78  
 Stearin, composition of .... 7, 235  
 „ isomeric modifications of .... 7, 244  
 Stearins .... 17, 117  
 Stearo-chlorhydrin .... 17, 122  
 Stearone .... 17, 129  
 Stearophanic acid .... 16, 366  
 Stearoptenes syn. with Camphors .... 7, 167  
 Stearoptene of oil of Anise .... 14, 191  
 „ Bergamot oil .... 13, 345  
 „ Bitter Almond oil .... 12, 173  
 „ Cassia oil .... 17, 395  
 „ oil of Cloves .... 14, 187  
 „ Lemon oil .... 14, 302  
 „ Parsley oil .... 15, 41  
 „ Peppermint oil .... 14, 450  
 „ Rose-oil .... 14, 395  
 Steatite .... 3, 40  
 Steel .... 3, 399; 5, 206  
 „ action of acids on .... 5, 209  
 „ alleged magnetisation of, by the violet rays of the spectrum .... 1, 167  
 „ alloys of .... 5, 210  
 „ amount of carbon in .... 5, 207  
 „ tempering of .... 5, 207  
 Steeping of wood to prevent putrefaction .... 7, 113  
 Steinheilite .... 3, 434  
 Stenhouse's Alkaloid from kidney-beans .... 10, 408  
 Stibmethylethylum .... 9, 85; 13, 500  
*Sterculia foetida*, oil of the seeds of .... 17, 99  
 Sternbergite .... 6, 196  
 Stethal.... .... 17, 103  
 Stibamyls .... 11, 125  
 Stibbiamyl .... 11, 129  
 Stibethyl .... 9, 79; 10, 523  
 „ Acetate .... 10, 527  
 „ Bromide .... 9, 83; 10, 526  
 „ Chloride .... 9, 83; 10, 526  
 „ -compounds .... 13, 499  
 „ Cyanide .... 9, 85  
 „ Iodide .... 9, 82; 10, 525  
 „ Oxide .... 9, 81; 10, 524  
 „ salts .... 9, 82; 10, 525  
 „ Selenide .... 9, 82  
 „ Sulphantimonite .... 9, 85  
 „ Sulphide .... 9, 81; 10, 525  
 Stibethylum .... 9, 85, 10, 527  
 Stibmethyl .... 7, 321  
 Stibmethylum.... .... 7, 322  
 Stibtriaryl .... 11, 126  
 Stibtriethyl, *see* Stibethyl.  
 Stilbene .... 12, 167  
 „ Bromide .... 12, 170  
 „ Peroxide .... 12, 178  
 „ Sulphide .... 12, 168  
 Stilbesate of Silver .... 12, 181  
 Stilbesic acid .... 12, 181  
 Stilbic acid .... 12, 182  
 Stilbite.... .... 3, 443  
 „ of Potash .... 12, 180  
 Stilbous acid .... 12, 178  
*Stillingia sebifera*, fat from the berries of .... 16, 388  
 Stillistearic acid .... 16, 366  
 Stilpnomelane .... 5, 285  
 Stoichiometrical calculation 1, 61—64  
 „ proportion or number .... 1, 42  
*Storax calamita* .... 17, 392  
 „ liquid .... 17, 391  
 „ liquid, preparation of cinnamic acid from .... 13, 270  
 „ solid .... 17, 392  
 „ volatile oil of liquid .... 13, 1  
 Strasburg Turpentine .... 18, 17  
 Strawberries, red colouring matter of .... 16, 529  
 Strength of Affinity .... 1, 136—145  
 Striegisane .... 3, 310  
 Strontia .... 3, 168  
 „ Acetate .... 8, 302  
 „ Acetate with Uranic acetate .... 8, 308

Strontia, Acetonitrate ....	13, 443	Strontia, Niccolate ....	5, 386
„ Alloxanate ....	16, 164	„ Nitranisate ....	13, 138, 586
„ Aluminate ....	3, 327	„ Nitrate ....	3, 179
„ Amidobenzoate ....	12, 164	„ Nitrate of, with stron-	
„ Amylosulphate ....	11, 57	tio-antimonic tartrate	10, 308
„ Anisate ....	13, 126	„ Nitrite ....	3, 179
„ Arachidate ....	17, 371	„ Nitrobenzoate ....	12, 125
„ Arseniate ....	4, 302	„ Nitrotoluylate ....	13, 22
„ Arsenite ....	4, 302	„ Oleate ....	17, 71
„ Aurate with Chloride		„ Oxalates	9, 129; 13, 516
of Strontium ....	6, 234	„ Perchlorate ....	3, 179
„ Azelaate ....	17, 81	„ Periodate ....	3, 176
„ Benzoate ....	12, 39	„ Pelargonate ....	13, 370
„ Bimethylophosphate ....	12, 483	„ Permanganate ....	4, 242
„ Borates ....	3, 171	„ Phosphates ....	3, 172
„ Bromate ....	3, 177	„ Phosphite ....	3, 172
„ Butyrate ....	10, 86	„ Picrate ....	11, 222
„ Camphorate ....	14, 459	„ Piperate ....	15, 10
„ Caprate ....	14, 488	„ Platinate ....	6, 328
„ Caproate ....	11, 417	„ Purpurate ....	10, 198
„ Carbonates ....	3, 170	„ Pyromeconate ....	10, 441
„ Chelidonate ....	12, 417	„ Pyromucate ....	10, 385
„ Chlorate ....	3, 178	„ Pyrotartrate ....	11, 90
„ Chlorite ....	3, 178	„ Racemate ....	10, 353
„ Chromate ....	4, 153	„ Rhodizonate ....	10, 402
„ Chrysammate ....	12, 4	„ Ricinoleate ....	17, 134
„ Cinnamate ....	13, 275	„ Saccharates ....	11, 518
„ Citrates ....	11, 449, 450	„ Salicylamate ....	12, 322
„ Comenate ....	11, 386	„ -salts....	3, 169
„ Croconate ....	10, 392	„ Selenite ....	3, 175
„ Ethylophosphate ....	8, 400	„ Silicate ....	3, 388
„ Eugenate ....	14, 206	„ Silicate with silicate of	
with Fluxes ....	3, 180	alumina ....	3, 420
„ Formiate ....	7, 278	„ Stannate ....	5, 99
„ Fumarate ....	10, 27	„ Stearate ....	17, 110
„ Gallate ....	12, 406	„ Styphnate ....	11, 233
„ Gambodate ....	17, 418	„ Suberate ....	13, 209
„ Hippurate ....	12, 78	„ Succinate ....	10, 119
„ Hydrate ....	3, 168	„ Sucrate ....	15, 284
„ Hydrate, electrolysis of	1, 458	„ Sulphate ....	3, 174
„ Hydrochlorate and		„ Sulphate with fluor-	
Stannite ....	5, 99	spar ....	3, 219
„ Hypobromite....	3, 177	„ Sulphite ....	3, 174
„ Hypophosphite ....	3, 171	„ Sulphovinate ....	8, 422
„ Hyposulphate ....	3, 174	„ Tartrate ....	10, 286
„ Hyposulphite ....	3, 173	„ Tartrelate ....	10, 235
„ Iodate ....	3, 176	„ Tartromethylate ....	10, 339
„ Iodo-aurate ....	6, 234	„ Tellurate ....	4, 424
„ Isobiglycolethylenate	15, 235	„ Tellurite ....	4, 424
„ Itaconate ....	10, 426	„ Tetrathionate ....	3, 174
„ Kinate ....	16, 228	„ Thiacetate ....	13, 449
„ Lactate ....	11, 482	„ Tungstate ....	4, 43
„ Malate ....	10, 215	„ Urate ....	10, 474
„ Maleates ....	8, 156	„ Valerate ....	11, 32
„ Manganate ....	4, 242	„ Vanadiates ....	4, 102
„ Margarate ....	16, 362	„ -water ....	11, 169
„ Mellitate ....	10, 6	„ and Alumina, oxalate	9, 135
„ Molybdate ....	4, 76	„ and Lead-oxide, Hypo-	
„ Mucate ....	11, 507	sulphite ....	5, 164



Strontia and Lime, carbonate....	3, 219	Strontium, Sulphovanadate ....	4, 102
„ and Lime, compound of	3, 219	„ and Carbon, sulphide	3, 175
„ and Mercuric oxide, hypo-		„ and Mercury, chloride	6, 107
sulphite ....	6, 107	„ and Mercury, iodide....	6, 107
Strontium and Mercury, bromide	6, 107	„ and Silicium, fluoride	3, 388
Strontia and Potash, silicate ....	3, 388	Struvite ....	3, 245
„ and Potash, tartrate....	10, 287	Strychnine ....	17, 479
„ and Silver-oxide, hypo-		„ and Bibromide of	
sulphite ....	6, 181	Ethylene, compounds	
„ and Soda, tartrate ....	10, 287	obtained from ....	17, 512
Strontian ....	3, 170	„ combination of, with	
„ phosphorus ....	1, 193	iodine ....	17, 489
Strontio-antimonic tartrate ....	10, 307	„ decompositions of ....	17, 484
„ -chromic oxalate ....	9, 142	„ detection of, in beer	17, 483
„ -ferric oxalate ....	9, 160	„ detection of, in cases	
„ -uronic acetate ....	13, 444	of poisoning ....	17, 482
Strontium ....	3, 167	„ memoirs relating to	17, 479
„ -amalgam ....	6, 106	„ with Mercuric Chlo-	
„ Ammonio-bromide ....	3, 180	ride ....	17, 497
„ Ammonio-chloride ....	3, 180	„ with Mercuric Cya-	
„ Bromide ....	3, 176	nide ....	17, 500
„ Bromide with Cyanide		„ with Picrotoxin ....	17, 504
of Mercury ....	8, 22	„ precipitation of, by	
„ Chloride ....	3, 177	nitroprusside of	
„ Chloride with Aurate		sodium ....	17, 502
of Strontia ....	6, 234	„ precipitation of, by	
„ Chloride with Cyanide		phosphantimonic	
of Mercury ....	8, 22	acid ....	17, 495
„ Chloro-aurate ....	6, 234	„ precipitation of, by	
„ Chloroplatinate ....	6, 328	phosphomolybdic	
„ Chlorostanate ....	5, 99	acid ....	17, 495
„ Chlorostannite ....	5, 99	„ preparation....	17, 480
„ -compound of Man-		„ properties ....	17, 483
nite ....	15, 366	„ reaction of, with gallic,	
„ Cyanide ....	12, 494	tannic, oleic, and	
„ Ferrocyanide ....	7, 482	margaric acids ....	17, 504
„ Fluoride ....	3, 179	Strychnine-salts :	
„ Hyposulpharsenite ....	4, 302	Acetate ....	17, 502
„ Iodide ....	3, 175	Antitartrate ....	17, 503
„ Iodide, with Cyanide		Arseniate ....	17, 496
of Mercury ....	8, 22	Arsenite ....	17, 496
„ Iodostannite ....	5, 99	Betuloretinate ....	17, 504
„ Mellonide ....	9, 393	Carbonate ....	17, 490
„ Peroxide ....	3, 170	Chlorate ....	17, 493
„ Phosphide ....	3, 171	Chloro-aurate ....	17, 498
„ Platinocyanide ....	10, 508	Chlorocadmiate ....	17, 496
„ Platino-platinidecya-		Chloromercurate ....	17, 497
nide ....	8, 53	Chloropalladite ....	17, 498
„ -salts, solubility of, in		Chloroplatinate ....	17, 498
alcohol ....	8, 267	Chlorozincate ....	17, 496
„ Selenides ....	3, 175	Chromate ....	17, 495
„ Selenocyanide ....	8, 123	Croconate ....	17, 504
„ Sulphantimoniate ....	4, 389	Dextrotartrate ....	17, 503
„ Sulphides ....	3, 173	Hippurate ....	17, 504
„ Sulphocyanide ....	8, 84	Hydriodate ....	17, 493
„ Sulphomolybdate ....	4, 76	Hydrobromate ....	17, 493
„ Sulphostannate ....	5, 99	Hydrochlorate ....	17, 493
„ Sulphotellurite ....	4, 424	„ with Mercuric	
„ Sulphotungstate ....	4, 44	Cyanide ....	17, 500

[illegible]

Succinate of Alumina ....	10, 122	Succinin ....	13, 580
„ Ammonia ....	10, 115	Succinomannitan ....	15, 377
„ Aniline ....	11, 263	<i>Succinum</i> ....	17, 430
„ Baryta ....	10, 119	Succinyl Chloride ....	10, 136
„ Benzylene ....	12, 225	„ Bibenzoyl and Bisulphophenyl, binitride of ....	12, 160
„ Berberine ....	17, 196	Succinyl-bisulphophenyl-bibenzamide ....	12, 160
„ Bismuth ....	10, 124	Succisterene ....	16, 248
„ Cadmium ....	10, 124	Sucrate of Baryta ....	15, 284
„ Cerium ....	10, 122	„ Cupric, colloidal ....	51, 539
„ Cetyl ....	16, 379	„ Ferric, colloidal ....	15, 539
„ Chromic ? ....	10, 123	„ of Lead ....	15, 288
„ Chromous ....	10, 123	„ Lime ....	15, 385, 539
„ of Cinchonidine ....	17, 614	„ Magnesia ....	15, 288
„ Cinchonine ....	17, 216	„ Strontia ....	15, 284
„ Cobalt ....	10, 127	„ Uranyl, colloidal ...	15, 539
„ Cupric ....	10, 128	Sucrates, colloidal condition of ...	15, 538
„ of Ethyl ....	10, 133	„ Metallic ....	15, 284
„ Ferric ....	10, 126	Sugar of Acorns ....	15, 210
„ Ferrous ....	10, 126	„ the Cane, <i>see</i> Cane-sugar.	
„ of Glucina ....	10, 122	„ detection of, in urine ...	15, 312
„ Lead ....	10, 124	„ formation of ammonia by eremacausis of aqueous solution of, in contact with air ....	7, 294
„ Lime ....	10, 119	„ formation of, from glycerin ....	13, 567
„ Magnesia ....	10, 121	„ inverse or inverted ...	15, 254, 336
„ Magnesia and Potash ....	10, 122	„ produced by decomposition of kinovin ....	15, 345
„ Manganous ....	10, 123	„ of Lead ....	8, 316
„ Mercuric ....	10, 128	„ liquid, from Honey ....	15, 336
„ Mercurous ....	10, 128	„ from Ononin ....	15, 346
„ of Methyl ....	10, 132	„ from Phlorizin ....	15, 347
„ Methyl-salicyl ....	12, 258	„ from Pinipierin ....	15, 847
„ Molybdenum ....	10, 122	„ preparation of Formic acid from ....	7, 372
„ Nickel ....	10, 127	„ preparation of Furfurol by oxidation of ....	10, 371
„ Potash ....	10, 116	„ preparation of Lactic acid from ....	11, 476
„ Quinidine ....	17, 302	„ preparation of Oxalic acid from ....	9, 113
„ Quinine ....	17, 290, 615	„ from Quercitrin ...	15, 348 ; 16, 535
„ Silver ....	10, 128	„ from Saponin ....	15, 348
„ Soda ....	10, 117	„ solutions, circular polarisation of ....	15, 244
„ Strontia ....	10, 119	„ various modes of fermentation of ....	7, 98
„ Tin ....	10, 124	„ -cane, preparation of sugar from ....	15, 242
„ Thorina ...	10, 122	„ -cane, Wax of ....	18, 81
„ Urea ....	13, 405	„ -maple ....	15, 240
„ Uranic ....	10, 123	Sulphacetate of Soda ? ...	8, 300
„ of Yttria ....	10, 122	Sulphacetates ....	8, 437
„ Zinc ....	10, 124	Sulphacetonyl, Hydrosulphate of ...	9, 14
„ Zirconia ....	10, 122		
Succinic acid ....	10, 108		
„ acid, formation of, in vinous fermentation ...	15, 275		
„ acid, preparation of, from amber ....	10, 110		
„ acid, preparation of, by fermentation of malate of lime ....	10, 113		
„ acid, preparation of, by oxidation of stearic acid and other fatty matters ....	10, 112		
„ anhydride ....	10, 135		



Sulphacetothymic acid ....	14, 420	Sulpharsenate of Cadmium ....	5, 66
Sulphacetylic acid ....	8, 412	"    Calcium ....	4, 305
Sulphamethylane ....	7, 307	Sulpharseniates of Cerium ....	4, 309
Sulphamide ....	2, 455	Sulpharsenate, Chromic ....	4, 313
"    (of Dumas) ....	2, 458	"    of Cobalt ....	5, 351
Sulphamidonates ....	15, 104	"    Cupric....	5, 474
Sulphamylic acid ....	11, 55	"    Ferric ....	5, 309
Sulphan and Sulphanides ....	2, 16	"    Ferrous ....	5, 309
Sulphanilic acid ....	11, 296	"    of Glucinum ....	4, 310
Sulphanisic acid ....	13, 128, 586	"    Lead ....	5, 174
Sulphanisolid ....	12, 262	"    Lithium ....	4, 299
Sulphanisyl, hydride ....	13, 131	"    Magnesium	4, 307, 390
Sulphantimonates ....	4, 356	"    Magnesium	
Sulphantimonate of Ammonium		and Ammo-	
"    Barium ....	4, 389, 372	nium ....	4, 308
"    Bismuth....	4, 450	"    Manganese....	4, 315
"    Cadmium ....	5, 66	"    Mercuric ....	6, 118
"    Calcium ....	4, 389	"    Mercurous ....	6, 118
"    Cobalt ....	5, 353	"    of Nickel ....	5, 392
"    Copper ....	5, 476	"    Platinic ....	6, 332
"    Copper and		"    of Potassium ....	4, 293
Iron ....	5, 492	"    Silver ....	6, 188
"    Ferrous ....	5, 311	"    Sodium ....	4, 297
"    of Lead ....	5, 177	"    Sodium and	
"    Manganous....	4, 391	Ammonium	4, 298
"    Mercuric ....	6, 121	"    Sodium and	
"    Mercurous ....	6, 121	Potassium....	4, 299
"    of Nickel ....	5, 393	"    Stannic ....	5, 103
"    Potassium	4, 380	"    Stannous ....	5, 103
"    Potassium,		"    Uranic....	4, 314
with Anti-		"    of Yttrium ....	4, 309
moniate of		"    Zinc ....	5, 50
Potash ....	4, 381	"    Zirconium ....	4, 311
"    Silver ....	6, 191	Sulpharsenic acid ....	4, 277
"    Sodium ....	4, 384	Sulpharsenious acid ....	4, 273
"    Stannous ....	5, 104	Sulpharsenites ....	4, 275
"    of Strontium	4, 389	Sulpharsenite of Ammonium	4, 288
"    Uranium....	4, 391	"    Antimony ....	4, 392
"    Zinc ....	5, 50	"    Auric ....	6, 238
Sulphantimonic acid ....	4, 354	"    of Barium ....	4, 301
Sulphantimonites ....	4, 353	"    Bismuth ....	4, 449
Sulphantimonite of Barium ....	4, 388	"    Cadmium ....	5, 65
"    Cuprous ....	5, 476	"    Calcium ....	4, 305
"    Ferrous ....	5, 311	"    Ceous ....	4, 309
"    of Lead ....	5, 175	"    Chromic ....	4, 312
"    Potassium	4, 378	"    of Cobalt ....	5, 351
"    Silver ....	6, 189	"    Cupric ....	5, 474
"    Sodium ....	4, 383	"    Ferric ....	5, 309
"    Stibethyl ....	9, 85	"    Ferrous....	5, 309
Sulphantimonious acid, amor-		"    of Glucinum ....	4, 310
phous ....	4, 340	"    Lead ....	5, 174
"    acid, crystal-		"    Lithium ....	4, 299
lised ....	4, 337	"    Magnesium	4, 307
Sulpharseniates ....	4, 777	"    Mercuric ....	6, 118
Sulpharsenate of Antimony ....	4, 392	"    Mercurous ....	6, 118
"    Auric ....	6, 238	"    Molybdic ....	4, 312
"    of Barium ....	4, 301	"    of Nickel ....	5, 392
"    Bismuth ....	4, 449	"    Platinic ....	6, 332

Sulpharsenite of Potassium ....	4, 293	Sulphate of Baryta with Fluoride of Calcium ....	3, 219
„ Silver ....	6, 188	„ Baryta with Iridic oxide ....	6, 391
„ Sodium ....	4, 297	„ Bebirine ....	17, 172
„ Stannous ....	5, 102	„ Benzidine ....	11, 339
„ Stannic....	5, 102	„ Benzylene....	12, 225
„ Uranic ....	4, 314	„ Berberine ....	17, 189
„ of Yttrium ....	4, 309	„ Biamidobenzoic acid	12, 150
„ Zinc ....	5, 49	„ Biamidobenzylene	12, 150
„ Zirconium ....	4, 310	„ Bibromallylamine ....	13, 549
Sulphates, action of, upon alcohol ....	13, 419	„ Bichloride of Sulphur	2, 345
„ alkaline, electrolysis of ....	1, 461	„ Bichlorobenzylene....	12, 117
„ compounds of, with double silicates ....	3, 456	„ Biplumbic Triethyl	13, 511
„ metallic ....	2, 188	„ Bisethyl ....	9, 89
Sulphate of Acediamine ....	12, 546	Sulphates of Bismuth-oxide ....	4, 435
„ Acetylum ....	10, 539	Sulphate of Blue oxide of Osmium ....	6, 411
„ Alanine ....	9, 435	„ Boric Fluoride ....	2, 364
„ Allyl and Hydrogen	13, 513	„ Brown Oxide of Chromium ....	4, 128
Sulphates of Alumina ....	3, 312	„ Brucine ....	17, 579
Sulphate of Alumina and Ammonia ....	3, 318	„ Butyl ....	10, 105
„ Alumina and Ferrous oxide ....	5, 276	„ Cacotheline ....	17, 359
„ Alumina and Lithia	3, 326	„ Cadmic oxide ....	5, 58
„ Alumina and Magnesia ....	3, 329	„ Cadmic oxide and Potash ....	5, 63
„ Alumina and Mangano-ous oxide ....	4, 242	„ Caffeine ....	13, 231
„ Alumina and Methylamine ....	13, 481	„ Caprylamine ....	13, 220
„ Alumina and Potash	3, 321	„ Carbon ....	7, 128
„ Alumina and Soda	3, 325	„ and Carbonate of Lead-oxide ....	5, 138
„ Alumina and Zinc-oxide ....	5, 46	„ of Carbyl ....	8, 412
„ Amarine ....	12, 196	„ Casein ....	18, 314
„ Amidobenzoic acid	12, 145	Sulphates of Ceric oxide ....	3, 269
„ Amidocuminic acid	14, 175	Sulphate of Ceric oxide and Potash	3, 273
„ Ammon, acid ....	2, 460	„ Ceroso-cerie oxide....	3, 269
„ Ammon, deliquescent	2, 461	„ Cerous oxide ....	3, 268
„ Ammon, neutral ....	2, 458	„ Cerous oxide and Ammonia ....	3, 272
Sulphates of Ammonia ....	2, 462	„ Cerous oxide and Potash ....	3, 272
Sulphate of Ammonio-chloride of Sulphur ....	2, 487	„ Cerous oxide and Soda ....	3, 273
„ Amylamine ....	11, 106	„ Chelerythrine ....	17, 159
„ Aniline ....	11, 258	„ Chelidonine ....	17, 165
„ Anthranilic acid ....	12, 328	„ Chinoline ....	13, 248
„ Antimonic oxide ....	4, 360	„ Chloraniline ....	11, 283
„ Aribine ....	17, 563	„ Chloride of Potassium ....	3, 63
„ Aricine ....	17, 570	„ Chloride of Selenium ? ....	2, 346
„ Arsenethylum ....	9, 79	„ Chloride of Sodium	3, 115
„ Arsenious acid ....	4, 280	„ Chlorobenzene ....	11, 175
„ Asparagine ....	10, 245	„ Chlorocodeine ....	17, 40
„ Aspartic acid ....	10, 232	„ Chlorogenine ....	18, 190
„ Atropine ....	16, 454	„ Chloronitroharmin	16, 114
„ Auric oxide ....	6, 211	„ Chromic Acid ? ....	4, 128
„ Baryta ....	3, 151	„ Chromic Oxide ....	4, 125
„ Baryta, electrolysis of	1, 461		

Sulphate of Chromic Oxide and Ammonia ....	4, 142	Sulphate of Cymidine ....	14, 219
„ Chromic Oxide and Potash ....	4, 147	„ Cystine ....	9, 439
„ Chromic Oxide and Soda ....	4, 152	„ Ether, tribasic ....	10, 518
„ Chromous Oxide ....	4, 125	„ Ethyl ....	8, 413
„ Chromous Oxide and Potash ....	4, 147	„ Ethylamine 9, 59; 13, 480	
„ Cinchonidine 17, 224, 228, 611		„ Alumina and Ethyl-amine ....	13, 481
„ Cinchonine ....	17, 206	„ Ethylene-brucine ....	17, 589
„ Cobaltoso-cupric ....	5, 496	„ Ethylostannethyl ....	9, 105
„ of Cobalt-oxide ....	5, 333	„ Ethylquinine ....	17, 308
„ Cobalt-oxide and Ammonia ....	5, 340	„ Ethylstrychnine ....	17, 511
„ Cobalt-oxide and Potash ....	5, 344	„ Didymium ....	3, 281
„ Cobalt-oxide and Zinc-oxide ....	5, 351	„ Ferrico-ammonic ....	5, 269
„ Cocaine ....	16, 302	„ Ferrico-potassic ....	5, 268
„ Codeine ....	17, 33	„ of Ferric oxide ....	5, 241
„ Conine ...	13, 159	„ Ferric oxide and Ammonia ....	5, 262
„ Copper, Electrolysis of ....	1, 463	„ Ferric oxide and Potash ....	5, 268
„ Copper and Strychnine ....	17, 496	„ Ferroso-ammonic ....	5, 269
„ Corydaline ....	17, 608	„ Ferroso-cupric ....	5, 492
„ Cratinine ....	10, 258	„ of Ferroso-ferric oxide and Magnesia ....	5, 274
„ Creatine ....	10, 254	„ Ferroso-potassic ....	5, 268
„ Cumidine ....	13, 349	„ of Ferrous oxide ....	5, 237
„ Cupranilium ....	11, 260	„ Ferrous oxide and Ammonia ....	5, 261
„ Cuprico-ammonic ....	5, 451	„ Ferrous oxide and Potash ....	5, 268
„ Cuprico-potassic ....	5, 459	„ Ferrous oxide and Zinc-oxide ....	5, 314
„ Cuprico-sodic ....	5, 462	„ Ferrous oxide, Zinc-oxide, and Ammonia ....	5, 314
„ of Cupric oxide ....	5, 425	„ Furfurine ....	10, 380
Sulphates of Cupric oxide and Ammonia ....	5, 450	„ Glaucine ....	17, 161
Sulphate of Cupric oxide and Cobalt oxide ....	5, 496	Sulphates of Glucina ....	3, 297
„ Cupric oxide and Ferrous oxide ....	5, 492	Sulphate of Glucina and Potash	3, 301
„ Cupric oxide with Fluoride of Calcium	5, 463	„ Glycol ....	9, 252
„ Cupric oxide and Magnesia ....	5, 463	„ Guanine ....	10, 481
„ Cupric oxide, Magnesia, and Ammonia ....	5, 463	„ Harmaline ....	16, 117
„ Cupric oxide and Nickel-oxide ....	5, 497	„ Harmine ....	16, 106
„ Cupric oxide, Nickel-oxide, and Potash	5, 497	„ Hydriodic acid ....	2, 268
„ Cupric oxide and Potash ....	5, 459	„ Hydroberberine ....	17, 254
„ Cupric oxide and Soda ....	5, 462	„ Hydrobromic acid....	2, 284
„ Cupric oxide, Zinc-oxide, and Potash	5, 481	„ Hydrochloric acid....	2, 341
		„ Hydrocyanharmaline ....	16, 121
		„ Iodethylquinidine 17, 310, 313	
		„ Iodide of Sulphur ? 2, 350	
		„ Iodine ....	2, 267
		„ Iodocinchonidine ....	17, 313
		„ Iodocinchonine ....	17, 313
		„ Iodoquinicine ....	17, 313
		„ Iodoquinidine ....	17, 313
		„ Iodoquinine ....	17, 312
		„ Iodostrychnine ....	17, 492
		„ Iridic oxide ....	6, 378



Sulphate of Iridious oxide ....	6, 377	Sulphate of Mercuric oxychloride	6, 64
Sulphates of Iron ....	5, 237	„ Mercurioso-mercuric	
Sulphate of Lanthanic oxide ....	3, 278	oxide ....	6, 30
„ Lanthanic oxide		„ Mercurous chloride	6, 64
and Potash ....	3, 279	„ Mercurous oxide ....	6, 28
„ Lanthopine ....	18, 197	„ Methstannamyl ....	11, 132
„ Laudanine ....	18, 198	„ Methylamine ....	7, 316
„ Lead-oxide ....	5, 136	„ Methylbrucine ....	17, 586
„ Lead oxide and		„ Methylene-stanna-	
Ammonia ....	5, 159	myl ....	11, 132
„ Lead-oxide with		„ Methyl ....	7, 304
Fluorspar ....	5, 164	„ Methyloplumbethyl	9, 107
„ Lead-oxide and		„ Methylostannethyl	9, 103
Potash ....	5, 161	„ Methyl-strychnine	17, 508
„ Lead-oxide and Soda	5, 163	Sulphates of Molybdic acid ....	4, 62
„ Lime ....	3, 200	Sulphate of Molybdic oxide ....	7, 62
„ Lime and Baryta ....	3, 218	„ Molybdic oxide and	
„ Lime with Fluoride		Potash ....	4, 72
of Calcium ....	3, 220	Sulphates of Molybdous oxide ....	4, 62
„ Lime and Potash ....	3, 215	Sulphate of Morphine ....	16, 430
„ Lime and Soda ....	3, 217	„ Naphthylamine ....	14, 99
„ Lithia ....	3, 129	„ Narcotine ....	16, 143
„ Lithia and Ammo-		„ Nickel-oxide ....	5, 373
nia ....	3, 132	„ Nickel-oxide and	
„ Lophine ....	12, 201	Ammonia ....	5, 381
„ Magnesia ....	3, 236	„ Nickel-oxide and	
„ Magnesia, electrolysis		Cupric oxide ....	5, 497
of ....	1, 461	„ Nickel-oxide and	
„ Magnesia and Ammo-		Ferrous oxide ....	5, 397
nia ....	3, 248	„ Nickel-oxide and	
„ Magnesia and		Potash ....	5, 384
Potash ....	3, 250	„ Nickel-oxide and	
„ Magnesia and Soda	3, 253	Zinc-oxide ....	5, 394
„ Manganic oxide and		„ Nicotine ....	14, 227
Ammonia ....	4, 233	„ Niobic acid ....	4, 18
„ Manganoso-manga-		„ Nitraniline ....	11, 291
nic oxide....	4, 224	„ Nitranisidine ....	12, 267
„ Manganous oxide....	4, 221	„ Nitric oxide ....	2, 445
„ Manganous oxide		„ Nitric oxide, com-	
and Ammonia ....	4, 233	bined with hydrated	
„ Manganous oxide		sulphuric acid ....	2, 447
and Potash ....	4, 238	„ Nitrocodeine ....	17, 41
„ Manganous oxide		„ Nitroharmaline ....	16, 124
and Soda....	4, 239	„ Nitroharmine ....	16, 100
„ Melaniline....	11, 353	„ Nitropapaverine ....	17, 261
„ Menaphthylamine	14, 126	„ Nitrotyrosine ....	13, 363
„ Menispermine ....	17, 53	„ Osmic oxide ....	6, 411
„ Mercurialine ....	18, 201	„ Osmious oxide ....	6, 411
„ Mercuric oxide ....	6, 28	„ Oxycinchonine ....	17, 232
„ Mercuric oxide and		„ Palladious oxide ....	6, 346
Ammonia ....	6, 80	„ Palladious oxide and	
„ Mercuric oxide with		Potash ....	6, 353
Phosphide of Mer-		„ Papaverine ....	17, 258
cury ....	6, 32	„ Paricine ....	17, 572
„ Mercuric oxide with		„ Pelopic acid ....	4, 22
Sulphide of Mer-		„ Pentachloride of	
cury ....	6, 32	Phosphorus ....	2, 341
„ Mercuric oxide and		„ Permanganic acid ?	4, 224
Potash ....	6, 99	„ Petinine ....	10, 151

Sulphate of Phenyl Chloride....	11, 175	Sulphate of Stannamyl ....	11, 131
" Phloramine ....	15, 70	" Stannethyl ....	9, 97
" Phosphuretted Hy-		" Stannic chloride ....	5, 91
drogen ....	2, 220	" Stannic oxide ....	5, 82
" Phthalidine ....	13, 34	" Stannous oxide ....	5, 81
" Picoline ....	11, 268	" Stibethyl 9, 82; 10,	525
" Piperidine....	10, 448	" Stibmethylethylum	13, 501
" Platinamine ....	6, 314	" Stibmethylum ....	7, 325
" Platinic oxide ....	6, 290	" Stibtriamyl ...	11, 128
" Platinic oxide and		" Strontia ....	3, 174
Alumina ....	6, 330	" Strontia with Fluor-	
" Platinic oxide and		spar ....	3, 219
Baryta ....	6, 327	" Strychnine ....	17, 491
" Platinic oxide and		" Strychnine with	
Potash ....	6, 321	Mercuric Chloride	17, 497
" Platinic oxide and		" Strychnine-brom-	
Soda ....	6, 325	ethylammonium ....	17, 513
" Platinous oxide ....	6, 289	" Tantalac acid ....	4, 5
" Platinous oxide and		" Tantalac acid and	
Potash ? ....	6, 321	Potash ....	4, 9
Sulphates of Potash ....	3, 39	" Tellurethyl ....	8, 383
Sulphate of Potash and Ammo-		" Telluric oxide ....	4, 407
nia ....	3, 71	" Telluromethyl ....	10, 493
" Potash with Chloride		" Tellurous oxide ? ...	4, 407
of Potassium ....	3, 71	Sulphates of Terechloride of Sul-	
" Potash with Chro-		phur....	2, 342
mate of Potash ....	4, 150	Sulphate of Tertravinylium	13, 489
" Potash, luminosity		" Thebaine ....	13, 169
accompanying the		" Thebenine....	18, 210
crystallisation of....	1, 206	" Thorina ....	3, 333
" Propylamine ....	9, 412	" Thorina and Potash	3, 335
" Quinidine....	17, 299	" Titanic oxide ....	3, 478
" Quinine ....	17, 277	" Titanic oxide and	
" Quinine and Iron....	17, 284	Potash ....	3, 485
" Rhodic oxide ....	6, 382	" Toluidine ....	12, 336
" Rhodic oxide and		" Tungstic acid ? ...	4, 34
Potash ....	6, 365	Sulphates of Uranic oxide	4, 176
" Rhodious oxide ....	6, 362	Sulphate of Uranic oxide and	
" Rhœaginine ....	18, 208	Ammonia ....	4, 185
" Ruthenic oxide ....	6, 399	" Uranic oxide and	
" Sarcosine ....	9, 433	Lime ....	4, 191
" Seminaphthylamine	14, 108	" Uranic oxide and	
" Sesquioxide of Iri-		Potash ....	4, 188
dium ....	6, 378	" Uranaso-uranic ox-	
" Sesquioxide of Os-		ide ....	4, 176
mium and Ammonia	6, 415	" Uranoso-uranic ox-	
" Silica ....	3, 360	ide and Potash ....	4, 188
" Silver-oxide ....	6, 154	Sulphates of Uranous oxide	4, 174
" Silver-oxide and		Sulphate of Uranous oxide and	
Potash ....	6, 178	Ammonia ....	4, 185
Sulphates of Sinapine ....	14, 526	" Uranous oxide and	
Sulphate of Solanine ....	18, 95	Potash ....	4, 187
" Soda ....	3, 100	" Urea ....	7, 369
" Soda, preparation		" Uric acid ? ...	10, 466
of carbonate from	3, 79	Sulphates, Vanadic ....	4, 93
" Soda and Ammonia	3, 119	" of Vanadic acid ....	4, 93
" Soda with Carbo-		Sulphate of Vanadic acid and	
nate of Lime ....	3, 217	Potash ....	4, 100
" Soda and Potash ....	3, 120	" Vanadic oxide, basic	4, 93

Sulphate of Vanadic oxide and Potash ....	4, 100	Sulphide of Bisethyl ....	9, 89
„ Veratrine ....	18, 182	Sulphides of Bismuth ....	4, 434
„ Xylidine ....	13, 147	Sulphide of Bismuth and Copper	5, 477
Sulphates of Yttria ....	3, 287	„ Bismuth, Copper, and Lead ....	5, 488
Sulphate of Yttria and Potash	3, 290	„ Bismuth and Nickel	5, 390
Sulphates of Zinc-oxide ....	5, 22	„ Bromosalicene ....	12, 287
Sulphate of Zinc-oxide, electro-lysis of ....	1, 463	„ Cadmium ....	5, 57
„ Zinc-oxide and Ammonia ....	5, 39	Sulphides of Calcium ....	3, 196
„ Zinc oxide and Magnesia ....	5, 46	„ Calcium with Chloride of Calcium ....	3, 219
„ Zinc-oxide and Potash ....	5, 43	„ Calcium with Fluoride of Calcium ....	3, 220
„ Zinc-oxide and Soda	5, 45	„ Calcium with Lime	3, 219
„ Zirconia ....	3, 344	„ Calcium and Sodium	3, 217
„ Zirconia and Ammonia ....	3, 347	„ Capryl ....	13, 193
„ Zirconia and Potash	3, 347	„ Carbon ....	2, 200
Sulphatoxygen ....	2, 16	„ Carbon, solution of, in alcohol ....	8, 264
Sulphazotic Chloride of Sulphur	2, 475	„ Carbon and Barium	3, 153
Sulphessal ....	12, 188	„ Carbon and Calcium	3, 202
Sulphetheric acid ....	10, 518	„ Carbon and Lithium	3, 129
Sulphetherisulphates ....	8, 436	„ Carbon and Magnesium ....	3, 239
Sulphethyl ....	8, 337	„ Carbon and Manganese ....	4, 225
„ with Bichloride of Platinum ....	8, 339	„ Carbon, phosphuretted ....	2, 219
„ Carbonate of ....	8, 445	„ Carbon with Piperidine ....	15, 15
„ with Protochloride of Mercury ....	8, 339	„ Carbon and Potassium ....	3, 42
„ Sulphite of ? ....	8, 404	„ Carbon and Sodium	3, 104
Sulphide of Acetyl ....	9, 356	„ Carbon and Strontium ....	3, 175
„ Allyl ....	9, 372; 13, 540	„ Cerium ....	3, 267
„ Alphene, &c. ....	9, 494	„ Cetyl ....	16, 367
„ Aluminium ....	3, 311	„ Chloride of Carbon	7, 357
„ Amyl ....	11, 38	Sulphides of Chromium ....	4, 123
„ Antimonic ....	4, 354	Sulphide of Chromium and Potassium ....	4, 157
„ Antimonious, amorphous ....	4, 340	Sulphides of Cobalt ....	5, 331
„ Antimonious, crystallised ....	4, 337	Sulphide of Cobalt with Arsenide of Cobalt ....	5, 351
„ of Antimony, Copper, and Lead ....	5, 487	Sulphides of Copper ....	5, 422
„ Antimony with Iodide of Antimony	4, 364	Sulphide of Copper and Barium	5, 463
„ Antimony, Silver, and Lead ....	6, 195	„ Copper and Calcium	5, 463
„ Arsenious ....	4, 273	„ Copper and Iron ....	5, 489
„ of Arsenetriethyl ....	9, 75	„ Copper and Lead ....	5, 485
„ Auric ....	6, 210	„ Copper and Magnesium ....	5, 463
„ Aurous ....	6, 210	„ Copper and Potassium ....	5, 458
Sulphides of Barium ....	3, 146	Sulphides, double, of Hydrogen and the Alkali-metals ....	2, 266
Sulphide of Barium with Fluoride of Calcium ....	3, 218	Sulphide of Ethyl ....	8, 337
„ Barium and Potassium ....	3, 164	„ Ethyl, action of chlorine on ....	10, 513
„ Benzoyl ....	12, 106	Sulphides of Ethylene ....	8, 354
„ Benzylene....	12, 49		



Sulphide of Ethylene and Hydrogen? ....	8, 403	Sulphides of Methyl, action of chlorine on ....	10, 500
„ Ferric ....	5, 231	„ Methyl, chlorinated ....	10, 500
„ Ferrous ....	5, 228	„ Methyl, Terechlorinated ...	7, 355
„ of Ferrous oxide? ....	5, 235	Sulphides of Nickel ....	5, 369
„ Glucinum ....	3, 297	Sulphide of Nickel and Iron ....	5, 396
Sulphides of Gold ....	6, 210	„ Niobium ....	4, 18
Sulphide of Gold and Potassium ....	6, 227	„ Nitrobenzylene ....	12, 134
„ Gold and Sodium ....	6, 230	„ Nitrogen ....	2, 442
Sulphides of Hydrogen ....	2, 193	Sulphides of Osmium ....	6, 410
Sulphide of Hydrogen and Ammonium ....	2, 452	Sulphide of Othyl ....	9, 356
„ Hydrogen and Barium ....	3, 149	„ Palladium ....	6, 346
„ Hydrogen and Bromosalicine ....	12, 290	„ Pelopium ....	4, 22
„ Hydrogen and Potassium ....	3, 31	„ Phosphoric ....	2, 217; 5, 217
„ Hydrogen and Strontium ....	3, 173	„ Phosphorous ....	2, 215
Sulphides of Iridium ....	6, 376	Sulphides of Phosphorus ....	2, 207—219
Sulphide of Iridium and Potassium ....	6, 384	Sulphide of Phosphorus, liquid, solubility of, in alcohol ....	8, 264
Sulphides of Iron ....	5, 227	„ Phosphorus and Zinc ....	5, 26
Sulphide of Iron and Barium ....	5, 273	„ Phosphorus and Silver ....	6, 155
„ Iron and Calcium ....	5, 274	Sulphides of Platinum ....	6, 286
„ Iron and Potassium ....	5, 268	Sulphide of Platinum and Potassium ....	6, 321
„ Iron and Sodium ....	5, 272	Sulphides of Potassium ....	3, 30
„ Lanthanum ....	3, 278	Sulphide of Potassium, action of, on organic compounds ....	7, 145
Sulphides of Lead ....	5, 132	Sulphides of Rhodium ....	6, 362
Sulphide of Lead and Barium ....	5, 163	„ Ruthenium ....	6, 399
„ Lead and Sodium ....	5, 162	Sulphide of Silicium ....	3, 359
„ Lithium ....	3, 128	„ Silicium and Potassium ....	3, 373
„ Lithium and Hydrogen ....	3, 128	„ Silver ....	6, 151
„ Magnesium ....	3, 234	„ Silver and Copper ....	6, 197
„ Manganese ....	4, 218	„ Silver and Iron ....	6, 196
„ Manganese and Potassium ....	4, 237	„ Silver and Lead ....	6, 195
„ Manganese and Sodium ....	4, 239	„ Silver and Potassium ....	6, 178
„ Mercuric, amorphous ....	6, 25	„ Sodium ....	3, 96
„ Mercuric, crystalline ....	6, 19	„ Stannethyl ....	6, 97
„ Mercurous ....	6, 19	„ Stannic ....	5, 80
Sulphides of Mercury ....	6, 19	„ Stannous ....	5, 78
Sulphide of Mercury and Barium ....	6, 105	„ of Stibethyl ....	9, 81; 10, 525
„ Mercury with Mercuric Nitrate ....	6, 76	„ Stibethylum ....	10, 528
„ Mercury with Mercuric Sulphate ....	6, 32	„ Stibmethylethylum ....	13, 501
„ Mercury and Potassium (hydrated) ....	6, 98	„ Stibmethylum ....	7, 324
Sulphides, metallic ....	2, 221	„ Stilbene ....	12, 168
„ metallic, electrolysis of ....	2, 456	„ Tantalum ....	4, 5
„ metallic, reduction of silver chloride by ....	6, 428	„ Tellurethyl ....	8, 383
		Sulphides of Tellurium ....	4, 405
		Sulphide of Thorium ....	3, 333
		Sulphides of Tin ....	5, 78
		Sulphide of Titanium ....	3, 477
		„ Triethylphosphine ....	12, 524
		Sulphides of Tungsten ....	4, 32
		Sulphide of Uranium ....	4, 173

Sulphide of Yttrium ....	3, 287	Sulphite of Manganous oxide ....	4, 220
„ Zinc ....	5, 19	„ Nickel-oxide ....	5, 372
„ Zirconium ....	3, 344	„ Nitroharmaline ....	16, 124
Sulphindigotates ....	13, 61	„ Nitric oxide ...	2, 444
Sulphindigotic acid ....	13, 58	„ Nitric oxide and	
„ acid, effect of sun-		Ammonia ....	2, 492
shine on the		„ Nitric oxide and	
colour of ....	7, 95	Potash ....	3, 70
Sulphisatanous acid ....	13, 105	„ Nitric oxide and	
Sulphisatyde ....	13, 103	Soda ....	3, 118
Sulphites ....	2, 172	„ Osmious oxide and	
„ of Alumina ....	3, 311	Potash ....	6, 417
Sulphite of Alumina and Ferric		„ Perchloride of Car-	
oxide ....	5, 277	bon ....	2, 337; 7, 350
Sulphites of Ammonia ....	2, 457	„ Picoline ....	11, 268
Sulphite of Ammonia, compounds		„ Platinous oxide? ....	6, 289
obtained by the ac-		„ Platinous oxide and	
tion of, on the		Ammonia ....	6, 298
green salt of Mag-		„ Platinous oxide and	
nus and its yellow		Potash ....	6, 321
modification ....	6, 305	„ Platinous oxide and	
„ Aniline ....	11, 258	Soda ....	6, 324
„ Antimonic oxide ....	4, 360	„ Potash ....	3, 38
„ Aurous oxide and		„ Potash with Chloro-	
Soda? ....	6, 232	Hyposulphate of	
„ Baryta ....	3, 150	Iridious oxide ....	6, 388
„ Bichlorinated Me-		„ Potash and Chloride	
thylic Chloride ....	7, 350	of Potassium with	
„ Bismuth-oxide ....	4, 435	Chloro-hyposulphate	
„ Cadmic oxide ....	5, 58	of Iridious oxide....	6, 390
„ Caprylic Aldehyde		„ Protochloride of Car-	
and Potash ....	13, 188	bon ....	2, 339
„ Cerous oxide ....	3, 267	„ Quinine ....	17, 277
„ Chlorobenzene ....	11, 174	„ Quinine with Orcin	17, 292
„ Chloronaphthalin ....	14, 505	„ Ruthenious oxide	
„ Chromic oxide ....	4, 125	and Potash ....	6, 402
„ Chromous oxide ....	4, 124	„ Silver-oxide ....	6, 153
„ Cobalt-oxide ....	5, 333	„ Silver-oxide and	
„ Cupric oxide ....	5, 424	Ammonia ....	6, 174
„ Cuproso-potassic		„ Silver-oxide and	
of Cuprous oxide ....	5, 423	Potash ....	6, 178
„ Cuprous oxide and		„ Silver-oxide and	
Potash ....	5, 459	Soda ....	6, 180
„ Ethyl ....	8, 405	„ Soda ....	3, 99
„ Ferric oxide ....	5, 336	„ Stannous oxide ....	5, 81
„ Ferrous oxide ....	5, 236	„ Strontia ....	3, 174
„ Glucina ....	3, 297	„ Sulphethyl? ....	8, 404
„ Harmaline ....	16, 117	„ Titanic oxide ....	3, 478
„ Iridious oxide with		„ Uranic oxide ....	4, 174
Chloride of Potas-		„ Uranous oxide ....	4, 174
sium ....	6, 388	„ Yttria ....	3, 287
„ Iridious oxide and		„ Zinc-oxide ....	5, 21
Potash ....	6, 384	„ Zirconia ....	3, 344
„ Lead-oxide ....	5, 135	Sulphobenzamide ....	12, 150
„ Lime ....	3, 199	Sulphobenzanilide ....	12, 160
„ Lithia ....	3, 129	Sulphobenzene or Sulphobenzide	11, 165
„ Magnesia ....	3, 235	Sulphobenzoate of Baryta	12, 54
„ Magnesia and Ammo-		„ Ethyl ....	12, 62
nia ....	3, 247	„ Lead ....	12, 55

Sulphobenzoate of Potash ....	12, 54	Sulpho-carvol, hydrosulphate ....	14, 418
"      Silver ....	12, 55	Sulphocetic, or Sulphocetylic acid,	
Sulphobenzobiphenylamide ....	12, 160	<i>see</i> Cetylene-sulphuric acid ....	16, 370
Sulphobenzoenic acid ....	12, 230	Sulphochloride, Mercuric ....	6, 63
Sulphobenzoic acid ....	12, 53	"      of Telluromethyl ....	10, 494
Sulphobenzol ....	12, 49	Sulphochlorisatin ....	13, 101
Sulphobenzolate of Aniline ....	11, 263	Sulphochromate of Soda and Potash	4, 152
"      Ethyl ....	11, 156	Sulphocinchonic acid ....	17, 232
Sulphobenzolic acid ....	11, 155	Sulphocinnamic acid ....	13, 278
Sulphobenzovinic acid ....	12, 63	Sulphocumolic acid ....	13, 344
Sulphobenzoyl, biamide of ....	12, 150	Sulphocyanogen, Lassaigue's ....	8, 113
Sulphobenzoyl-chloride ....	12, 117	Sulphocyanate of Aniline ....	11, 262
Sulphobenzoyl, hydride of ....	12, 168	Sulphocyanides ....	8, 75; 12, 499
"      and Hydrogen,		"      action of hydrio-	
nitride of ....	12, 150	dic ethers on....	13, 413
"      Phenyl and Hy-		"      metallic, electro-	
drogen, binitride		lysis of ....	1, 456
of ....	12, 160	"      oxidation of ....	13, 413
Sulphobismuthate of Lead ....	5, 179	"      solubility of, in	
Sulphobromide, Mercuric ....	6, 45	alcohol ....	8, 273
Sulphobutylic acid ....	10, 105	Sulphocyanide of Allyl....	13, 544
Sulphocacodylates ....	9, 336	"      Aluminum ....	8, 85
Sulphocamphorate of Ammonia	13, 379	"      Ammonium ....	8, 76
"      Barium and		"      Amyl 11, 68; 13, 460	
Copper ....	13, 380	"      Barium ....	8, 84
"      Baryta ....	13, 379	"      Barium with	
"      Copper ....	13, 380	Cyanide of	
"      Lead ....	13, 380	Mercury ....	8, 96
"      Lime ....	13, 380	"      Benzoyl ....	12, 163
"      Potash ....	13, 379	"      Bismuth ....	8, 86
"      Silver ....	13, 383	"      Cadmium ....	8, 87
Sulphocamphoric acid ....	13, 379	"      Calcium ....	8, 85
Sulphocaprylates ....	13, 197	"      Calcium with	
Sulphocaprylic acid ....	13, 196	Cyanide of	
Sulphocarbanilide ....	11, 350	Mercury ....	8, 96
Sulphocarbomethylic acid ....	7, 293	"      Chromium ....	8, 85
Sulphocarbonaphthalide ....	14, 124	"      Cobalt ....	8, 89
Sulphocarbonate of Ammonia	2, 462	"      Cupric ....	8, 92
"      Amyl ....	11, 60	"      Cuproso-cupric ....	8, 92
"      Bismuth ....	4, 436	"      Cuprous ....	8, 90
"      Cadmium ....	5, 58	"      Cuprous, with	
"      Chromium....	4, 129	Xanthamide ....	9, 282
"      Cobalt ....	5, 334	"      of Ethyl 8, 489; 13, 461	
"      Copper ....	5, 431	"      Ethylene	
"      Ethyl ....	8, 465	10, 521; 13, 461	
"      Ferric ....	5, 246	"      Gold ....	8, 97
"      Ferrous ....	5, 245	Sulphocyanides of Iron....	8, 88
"      of Gold ....	6, 211	Sulphocyanide of Lead ....	8, 87
"      Lead ....	5, 138	"      Magnesium ....	8, 85
"      Methyl ....	7, 293	"      Magnesium,	
"      Methyl-oxide	7, 292	with Cyanide	
"      Nickel ....	5, 374	of Mercury ....	8, 96
"      Piperidine....	10, 448	Sulphocyanides of Mercury	8, 94
"      Platinum ....	6, 290	Sulphocyanide of Mercury and	
"      Silver ....	6, 154	Potassium ....	8, 95
"      Stannic ....	5, 82	"      Methyl ....	8, 121
"      Stannous ....	5, 82	"      Methyl, action	
"      of Uranium?	4, 178	of chlorine	
"      Zinc ....	5, 26	on ....	10, 511



Sulphocyanide of Molybdenum....	8, 85	Sulphomolybdate of Copper ....	5, 467
„ Naphthyl ....	14, 119	„ Ferric ....	5, 298
„ Nickel ....	8, 90	„ Ferrous ....	5, 297
„ Palladium ....	8, 97	„ of Glucinum....	4, 78
„ Phenyl-naph- thylamine ....	14, 123	„ Lead ....	5, 168
„ Platinum ....	8, 97	„ Lithium ....	4, 74
„ Potassium ....	8, 78	„ Magnesium ....	4, 77
„ Potassium with Cyanide of		„ Manganese ....	4, 247
Mercury ....	8, 96	„ Mercuric ....	6, 112
„ Potassium, re- action of, with		„ Mercurous ....	6, 112
chloride of		„ of Nickel ....	5, 387
acetyl ....	10, 521	„ Platinic ....	6, 331
„ Silver ....	8, 97	„ of Potassium....	4, 70
„ Silver and Po- tassium ....	8, 97	„ Potassium with Nitre ....	4, 73
„ Sodium ....	8, 83	„ Silver ....	6, 183
„ Stannous ....	8, 87	„ Sodium ....	4, 74
„ of Strontium ....	8, 84	„ Stannic ....	5, 101
„ Thebenine ....	18, 211	„ Stannous ....	5, 101
„ Uranium ....	8, 85	„ of Strontium....	4, 76
„ Yttrium ....	8, 85	„ Yttrium ....	4, 78
„ Zinc ....	8, 86	„ Zinc ....	5, 47
Sulphocyanobenzylene ....	12, 163	Sulphomolybdic acid ....	4, 59
Sulphocymenic, or Sulphocymo- lic acid ....	14, 188	Sulphomolybdous acid ....	4, 59
Sulphoflavic acid ....	13, 68	Sulphomorphide ....	16, 438
Sulphofluoride, Mercuric ....	6, 66	Sulphomuriatic acid ....	2, 331
Sulphoform ? ....	7, 332 ; 13, 399	Sulphonaphthalate of Ethyl ....	14, 506
„ solubility of, in		Sulphonaphthalates, metallic ....	14, 16
alcohol ....	8, 273	Sulphonaphthalic acid ....	14, 13
Sulphoformic acid ....	7, 294	„ acid, derivatives	
Sulphofulvic acid ....	13, 68	of ....	14, 506
Sulphoglyceric acid ....	9, 494	Sulphonaphthalide ....	14, 29
Sulphoglycolic acid ....	13, 428	Sulphonaphthalin ....	14, 28
Sulpho-hydrokinone, brown ....	11, 167	Sulphonaphthylamic acid ....	14, 109
„ „ yellow ....	11, 166	Sulphonarcotide ....	16, 149
Sulphomellonides ....	9, 473	Sulphophenilide ....	11, 370
Sulphomesitylo-sulphate of Lead	9, 30	Sulphophenic acid ....	11, 157
„ -sulphuric acid ...	9, 30	Sulphophenyl, Chloride ....	11, 174
Sulphometanethic acid ....	14, 200	„ Benzoyl and Me- thyl, nitride of	12, 159
Sulphomethylates, action of		„ Benzoyl and Hy- drogen, nitride	
water on	10, 496	of ...	12, 157
„ spontaneous		„ and Bibenzoyl, nitride of	12, 159
decomposi- tion of ....	10, 495	Sulphophenylamide ....	11, 236
Sulphomethylic acid ....	7, 305	Sulphophenylbenzamic acid ..	12, 158
Sulphomolybdate of Ammonium	4, 68	Sulphophloretic acid ....	13, 313
„ Auric....	6, 237	Sulphophoenicic acid ....	13, 95
„ of Barium ....	4, 76	Sulphophosphates ...	2, 218
„ Bismuth ....	4, 448	Sulphophosphate of Ammonia....	2, 463
„ Cadmium ....	5, 65	„ Cupric ....	5, 432
„ Calcium ....	4, 76	„ Mercuric ....	6, 31
„ Ceric....	4, 77	„ of Silver ....	6, 155
„ Cerous ....	4, 77	Sulphophosphide of Potassium....	3, 43
„ of Chromium	4, 156	Sulphophosphites ....	2, 216
„ Cobalt ....	5, 347	Sulphophosphite, Cuprous ....	5, 431
		„ Ferrous ....	5, 246
		„ Mercuric ....	6, 31

Sulphophosphite of Silver	....	6, 155	Sulphotellurite of Cobalt	....	5, 353
Sulphophosphoric acid....	....	2, 217	"    Copper	....	5, 477
Sulphophosphorous acid	....	2, 215	"    Ferrous	....	5, 312
Sulphophosphovinic acid	....	8, 466	"    of Lead	....	5, 178
Sulphopianic acid	....	14, 432	"    Magnesium	....	4, 425
Sulphoplatinate of Ammonium....	....	6, 298	"    Mercuric	....	6, 122
"    Sodium	....	6, 324	"    Platinic	....	6, 333
Sulphopropylic acid	....	9, 399	"    of Potassium	..	4, 420
Sulphopurpuric acid	....	13, 67	"    Silver	....	6, 193
Sulphoquinic acid, <i>see</i> Quinine-			"    Sodium	....	4, 422
sulphuric acid	....	17, 507	"    Stannic	....	5, 104
Sulphoretene	....	17, 11	"    Stannous	....	5, 104
Sulphorhodate of Potassium	....	6, 365	"    of Strontium	....	4, 424
Sulphorufic acid	....	13, 68	"    Zinc....	....	5, 51
Sulphosaccharic acid	....	15, 330	Sulphotellurous acid	....	4, 405
Sulphosalicol	....	12, 274	Sulphoterebic acid	....	14, 277
Sulphosalicylate of Ethyl	....	12, 281	Sulphotymic acid	....	14, 419
Sulphosalicylates, metallic	....	12, 276	Sulphotoluates	....	12, 231
Sulphosalicylic acid	....	12, 275	Sulphotoluic acid	....	12, 230
Sulphoselenide of Mercury	....	6, 33	Sulphotoluol	....	12, 283
Sulphosinipate of Ammonium	....	10, 34	Sulphotungstate of Ammonium		4, 58
"    Barium	....	10, 35	"    Auric	....	6, 237
"    Calcium	....	10, 35	"    of Barium	....	4, 43
"    Potassium	....	10, 34	"    Bismuth	....	4, 448
"    Sodium	....	10, 35	"    Cadmium	....	5, 65
Sulphosinapic acid	....	10, 33	"    Calcium	....	4, 44
Sulphosomethylic acid....	....	7, 295	"    Cerium	....	4, 45
"    acid, terchlo-			"    Cobalt	....	5, 346
minated	....	7, 351	"    Copper	....	5, 466
Sulphostannate of Ammonium....	....	5, 93	"    Ferric	....	5, 297
"    Barium	....	5, 99	"    Ferrous	....	5, 297
"    Calcium	....	5, 100	"    of Lead	....	5, 167
"    Iron and Cop-			"    Magnesium	4, 45	
per....	....	5, 496	"    Manganese	4, 246	
"    Potassium	....	5, 96	"    Mercuric	....	6, 111
"    Sodium	....	5, 98	"    Mercurous	....	6, 111
"    Strontium	....	5, 99	"    of Nickel	....	5, 387
Sulphostannic acid	....	5, 80	"    Platinum	....	6, 331
Sulphostannous acid	....	5, 78	"    Potassium....	4, 40	
Sulphosuccinanyl	....	11, 318	"    Potassium		
Sulphosuccinate of Ammonia	....	10, 130	with Ni-		
"    Baryta	....	10, 131	trate of		
"    Lead	....	10, 131	Potash	....	4, 40
"    Lime	....	10, 131	"    Potassium		
"    Potash	....	10, 130	with Tung-		
"    Silver	....	10, 132	state of		
Sulphosuccinic acid	....	10, 129	Potash	....	6, 46
Sulphotellurate, Ferric	....	5, 312	"    of Silver	....	6, 183
"    of Lithium	....	4, 423	"    Sodium	....	4, 42
"    Mercurous	....	6, 122	"    Stannic	....	5, 101
"    of Nickel	....	5, 393	"    Stannous	....	5, 101
Sulphotelluric acid	....	4, 406	"    of Strontium....	4, 44	
Sulphotelluride of Bismuth	....	4, 450	"    Vanadium....	4, 104	
Sulphotellurite of Ammonia	....	4, 415	"    Zinc	....	5, 47
"    Auric	....	6, 238	Sulphotungstic acid	....	4, 33
"    of Bismuth	....	4, 450	Sulphotungstite of Sodium	....	4, 42
"    Cadmium	....	5, 66	Sulphotungstous acid	....	4, 32
"    Calcium	....	4, 424	Sulphovanadiate of Ammonium		4, 98
"    Cerium	....	4, 425	"    Barium	....	4, 101

- |                                 |               |                                   |                  |
|---------------------------------|---------------|-----------------------------------|------------------|
| Sulphovanadiate of Calcium .... | 4, 102        | Sulphur, history of ....          | 2, 153           |
| „ Potassium ....                | 4, 100        | „ Iodide of ....                  | 2, 267           |
| „ Strontium ....                | 4, 102        | „ Iodide, sulphate of ? ....      | 2, 350           |
| Sulphovanadic acid ....         | 4, 92         | „ melting and solidifica-         |                  |
| Sulphovanadite of Ammonium....  | 4, 98         | „ tion of ....                    | 2, 158           |
| „ Potassium ....                | 4, 100        | „ memoirs relating to ....        | 2, 151           |
| Sulphovanadous acid ....        | 4, 90         | „ milk of ....                    | 2, 159           |
| Sulphovinates ....              | 8, 41         | „ modifications of ....           | 2, 156           |
| „ constitution of ....          | 10, 516       | „ native, crystalline form        |                  |
| „ stable ....                   | 10, 517       | „ of ....                         | 2, 156           |
| Sulphovinate of Wine-oil ....   | 13, 777       | „ natural, occurrence of          | 2, 154           |
| Sulphovinic acid ....           | 8, 415        | „ -nuclei ....                    | 7, 170           |
| „ acid, constitution of         | 10, 515       | „ in organic compounds            | 7, 5             |
| „ acid, formation of,           |               | „ oxides of ....                  | 2, 160           |
| „ from alcohol ....             | 8, 222        | „ preparation of ....             | 2, 154           |
| „ acid, formation of            |               | „ Protochloride, carbonate        |                  |
| „ Aldehyde from ....            | 13, 438       | „ of ....                         | 2, 339           |
| Sulphoviridic acid ....         | 13, 66        | „ purification of ....            | 2, 155           |
| Sulphoxanthic acid ....         | 8, 466        | „ replacement of, by oxy-         |                  |
| Sulphoxiarsenate of Potash .... | 4, 294        | „ gen ....                        | 7, 76            |
| Sulphoxiarsenic acid ....       | 4, 280        | „ rolled ....                     | 2, 156           |
| Sulphoxylic acid ....           | 13, 117       | „ -salts....                      | 2, 9, 229        |
| Sulphoxyphosphoric acid ....    | 2, 220        | „ -salts, double ....             | 2, 14            |
| Sulphur ....                    | 2, 151        | „ Selenide ....                   | 2, 243           |
| „ -acids ....                   | 2, 229        | „ soft, amorphous ....            | 2, 157           |
| „ Ammonio-chloride of,          |               | „ solubility of, in volatile      |                  |
| „ with Ammonio-sul-             |               | „ oils ....                       | 7, 168           |
| „ phide of Nitrogen ....        | 2, 493        | „ solution of, in alcohol         | 8, 263           |
| „ Ammonio-dichloride of         | 2, 483        | „ springs, occurrence of          |                  |
| „ Ammonio-protochloride         |               | „ baregin in ....                 | 18, 457          |
| „ of ....                       | 2, 484        | „ with Stannic Chloride           | 5, 89            |
| „ <i>Antimonii auratum</i> .... | 4, 354        | „ substitution of, for            |                  |
| „ -bases ....                   | 2, 229        | „ oxygen ....                     | 7, 76            |
| „ Bichloride, carbonate         |               | „ Sulphate of Ammonio-            |                  |
| „ of ....                       | 2, 337        | „ chloride of ....                | 2, 487           |
| „ Bichloride with Pen-          |               | „ Sulphazotic Chloride            |                  |
| „ tachloride of An-             |               | „ of ....                         | 2, 475           |
| „ timony ....                   | 4, 370        | „ Terchloride, sulphate           |                  |
| „ Bichloride, sulphate of       | 2, 345        | „ of ....                         | 2, 342           |
| „ boiling point of ....         | 2, 158        | „ volatile liver of ....          | 2, 454           |
| „ Bromide of ....               | 2, 283        | „ and Arsenic, chloride           |                  |
| „ Carbonate of Ammonio-         |               | „ of ....                         | 4, 285           |
| „ chloride of ....              | 2, 486        | „ and Tin, chloride of ....       | 5, 90            |
| „ in cast iron ....             | 5, 214        | „ and Titanium, chloride          |                  |
| „ Chlorides of ....             | 2, 331        | „ of ....                         | 3, 481           |
| „ combustion of ....            | 2, 169        | Sulphurets, <i>see</i> Sulphides. |                  |
| „ compounds of, with Hy-        |               | Sulphuret of Antimony, golden     | 4, 354           |
| „ drogen ....                   | 2, 93         | „ Baryta ....                     | 3, 146           |
| „ compounds of, with            |               | Sulphuretted Charcoal ....        | 2, 206           |
| „ Nuclei ....                   | 7, 211        | „ Chyazic acid ....               | 8, 70            |
| „ compounds of, with            |               | „ Hydrogen ....                   | 2, 195           |
| „ Oxygen ....                   | 2, 160        | „ Hydrogen, forma-                |                  |
| „ crude....                     | 2, 155        | „ tion of, in fermenta-           |                  |
| „ crystallisation of, by        |               | „ tion and putre-                 |                  |
| „ slow cooling from             |               | „ faction ....                    | 7, 97            |
| „ fusion ....                   | 2, 157        | Sulphuric acid....                | 2, 175           |
| „ dimorphism of                 | 1, 98; 2, 156 | „ action of, upon                 |                  |
| „ flowers of ....               | 2, 156        | „ alcohol                         | 8, 221;          |
| „ Fluoride of ....              | 2, 364        |                                   | 10, 515; 13, 419 |



Sulphuric acid, action of, upon ether....	10, 518	Sulphuric ether ....	8, 171, 413
„ anhydrous, action of, on chloride of acetyl	13, 455	Sulphurous acid ....	2, 168
„ anhydrous, compounds of, with sulphur ....	2, 178	„ absorption of, by volatile oils ....	7, 167
„ anhydrous, compound of, with sulphurous acid	2, 170	„ aqueous, electrolysis of ....	1, 452
„ anhydrous, decompositions of	2, 177	„ copulated acids produced by, with wood-spirit	7, 224
„ anhydrous, preparation of ....	2, 176	„ expansion of, by heat ....	1, 229
„ anhydrous, properties of ....	2, 177	„ formation of, by heating sulphuric acid with alcohol ....	8, 237
„ aqueous, quantities of anhydrous acid and oil of vitriol in	2, 186—188	„ gas, absorption of, by alcohol	8, 263
„ bi-hydrated ....	2, 185	„ maximum tension of, at different temperatures....	1, 261 ; 2, 503
„ compound of, with Iodic acid	2, 258	„ presence of, in the air ....	2, 411
„ concentrated ....	2, 180	„ substitution of, for hydrogen in organic compounds ....	7, 74
„ concentrated, action of, on organic compounds ....	7, 127	„ sulphuretted ....	2, 160
„ copulated acids produced by ....	7, 225	Sulphurous ether ....	8, 405
„ decomposition of urea by ....	7, 367	Sulphydrates ....	2, 226
„ dilute ....	2, 185	Sulphydrate of Cetyl ....	16, 367
„ dilute, action of, on organic compounds ....	7, 129	„ Potassium ....	3, 31
„ electrolysis of ....	1, 451	Sulphydric acid . ....	2, 195
„ ethylated ....	13, 414	Sumach, preparation of gallic acid from ....	12, 397
„ formation of ....	2, 175	„ wax of ....	18, 163
„ fuming ....	2, 180	Sumatra Camphor ....	14, 332
„ heat developed in the combination of, with water	1, 294	Sumbul Balsam ....	17, 453
„ hydrates of ....	2, 180	Summer Rape, oil of ....	17, 554
„ impurities in ....	2, 181	<i>Summitates Tanaceti</i> , bitter principle obtained from ....	18, 242
„ monohydrated, properties of ....	2, 184	Sun, temperature of ....	1, 221
„ Nordhausen ....	2, 180	Sunflower oil ....	16, 315
„ purification of, from oxides of nitrogen ....	2, 182	Sunshine, effect of, on coloured fabrics, and on the colours of flowers ....	7, 95
„ solution of, in alcohol ....	8, 263	Superphosphate of Lime ....	3, 196
„ terhydrated ....	2, 185	Supporters of Combustion ....	2, 18
Sulphuric Anhydride, <i>see</i> Sulphuric acid, anhydrous.		Surinamine ....	17, 316
		Sweet Sedge, oil of ....	14, 400
		<i>Swietenia senegalensis</i> , bitter from the bark of ....	18, 218
		Sycoceryl Acetate ....	17, 44
		„ -acetic Ether ....	17, 44
		„ Alcohol ....	17, 43
		„ Benzoate ....	17, 45
		„ -benzoic Ether ....	17, 45
		Sycoretin ....	17, 46
		Sylvates ....	17, 320

Sylvic acid	....	....	....	17, 318	<i>Syringa vulgaris</i> , volatile oil	
Sylvinolates	....	....	....	18, 1	from the flowers of	.... 14, 377
Synantherin	....	....	....	15, 112	Syringenin	.... 16, 159
Synaptase	....	....	....	18, 452	Syringin	.... 16, 161
Syndesmides	....	....	....	7, 26, 44	Syringopierin	.... 16, 160
Syntonin	....	....	....	18, 267	Syrup-sugars, Ventzke's	.... 15, 336
Syringa, oil of	....	....	....	14, 401	Systems of Crystallography	.... 1, 15
<i>Syringa vulgaris</i> , jelly from	....	....	....	15, 312		

## T.

<i>Tabermontana utilis</i> , milky sap					Tannate of Potash	.... 15, 464
of	....	....	....	17, 351	„ Quinine	.... 17, 293
Tabular spar	....	....	....	3, 388	„ Soda	.... 15, 465
Tacamahac resin	....	....	....	17, 430	„ Tin	.... 15, 467
Tachylyte	....	....	....	3, 429	„ Titanic	.... 15, 466
<i>Tagetes glandulosa</i> , volatile oil					„ of Zinc	.... 15, 467
of	....	....	....	15, 401	Tannecortepinic acid	.... 15, 492
„ <i>patula</i> and <i>T. erecta</i> ,					Tanned Leather	.... 15, 473
emission of light by					Tannic acid	.... 15, 449
the flowers of	....	....	....	1, 187	„ combination of, with	
Taguyin	....	....	....	18, 211	Acetone and Am-	
Taigutic acid	....	....	....	16, 521	monia	.... 15, 472
Talbot's Calotype process	....	....	....	1, 176	„ combination of, with	
„ Chloride of Silver pro-					animal skin	.... 15, 473
cess	....	....	....	1, 173	„ combination of, with	
Talc	....	....	....	3, 399	Fibrin	.... 18, 330
„ hardened	....	....	....	3, 451	„ decomposition of, by	
Talcium	....	....	....	3, 221	Alkaline Sulphites	15, 461
Talc-lithomarge	....	....	....	3, 413	„ decomposition of, by	
„ -slate	....	....	....	3, 451	Alkalis	.... 15, 461
Tallochlor	....	....	....	17, 22	„ decomposition of, by	
Tallow of <i>Valeria indica</i>	....	....	....	16, 400	Bromine	.... 15, 459
„ Chinese or Vegetable	....	....	....	16, 388	„ decomposition of, by	
Tanacetin	....	....	....	18, 342	Chlorine	.... 15, 459
Tangin-camphor	....	....	....	18, 242	„ decomposition of, by	
Tanginin	....	....	....	18, 242	Chromic acid	.... 15, 462
Tanaspidic acid	....	....	....	15, 496	„ from Cinchona barks	15, 479
Tannate of Absynthiin	....	....	....	17, 356	„ decomposition of, by	
„ Alumina	....	....	....	15, 466	combustion	.... 15, 458
„ Ammonia	....	....	....	15, 463	„ decomposition of, by	
„ Antimony	....	....	....	15, 466	fermentation	.... 15, 462
„ Baryta	....	....	....	15, 465	„ from fruits	.... 15, 419
„ Bismuth	....	....	....	15, 467	„ decomposition of, by	
„ Caffeine	....	....	....	13, 235	heat	.... 15, 458
„ Cinchonine	....	....	....	17, 219	„ decomposition of, by	
„ Colchicine	....	....	....	17, 604	Hydrochloric acid	15, 459
„ Cupric	....	....	....	15, 470	„ decomposition of, by	
„ of Digitaletin	....	....	....	16, 329	Iodic acid	.... 15, 459
„ Ferric	....	....	....	15, 469	„ decomposition of, by	
„ Ferrous	....	....	....	15, 469	Iodine	.... 15, 459
„ of Lead	....	....	....	15, 467	„ decomposition of, by	
„ Lime	....	....	....	15, 466	by metallic salts	15, 462
„ Magnesia	....	....	....	15, 466	„ decomposition of, by	
„ Menyanthin	....	....	....	16, 31	Nitric acid	.... 15, 460
Tannates of Mercury	....	....	....	15, 470	„ decomposition of, by	
Tannate of Morphine	....	....	....	16, 436	Osmic acid	.... 15, 461

Tannic acid, decomposition of, by				Tantalate of Terchloride of Tan-			
Ozone ....	15,	458		talum ? ....	4,	6	
decomposition of, by				" Uranous oxide ....	4,	192	
Peroxide of Man-				Tantallic acid ....	4,	2	
ganese ....	15,	462		" Borate of ....	4,	4	
decomposition of, by				" Hydrochlorate of ....	4,	6	
Sulphuric acid ....	15,	459		" Hydrofluates of....	4,	8	
diffusibility of ....	15,	463		" Phosphate of ....	4,	4	
estimation of, in				" Sulphate of ....	4,	5	
astringents ....	15,	456		" and Lime, hydro-			
insoluble compounds				fluates of ....	4,	11	
of, with Alkaloids	7,	177		" and Potash, sul-			
precipitation of Al-				phate of ....	4,	9	
bumin by ....	15,	473		Tantalide of Iron ....	5,	292	
precipitation of Al-				" Manganese ....	4,	246	
kaloids by ....	15,	473		Tantalite ....	5,	293	
precipitation of Ge-				" of Ferrous oxide ....	5,	292	
latin by ....	15,	473		Tantalous acid ....	4,	2	
precipitation of				" containing Tung-			
Starch-solution by	15,	473		sten ....	4,	45	
preparation of ....	15,	453		Tantalum ....	4,	1	
properties of ....	15,	457		" Alloys, ....	4,	14	
purification of ....	15,	455		" Ferrocyanide ....	7,	487	
reaction of, with				" Fluoride ....	4,	8	
Arsenates and Ar-				" Oxalate ....	9,	136	
senites ....	15,	466		" Oxide ....	4,	2, 3	
reaction of, with				" Sulphide ....	4,	5	
Chromic oxide ....	15,	466		" Terchloride ....	4,	6	
reaction of, with				" and Ammonium, fluo-			
Cobalt-salts ....	15,	470		ride of ....	4,	9	
reaction of, with				" and Lead, fluoride of	5,	166	
Silver oxide and				" and Potassium, fluo-			
Nitrate ....	15,	471		ride of ....	4,	10	
reaction of, with				" and Sodium, fluoride			
Uranic oxide ....	15,	466		of ....	4,	11	
reaction of, with				Tar, distillation of ....	15,	140	
Vanadiates ....	15,	466		" empyreumatic ....	7,	81	
solution of, in Al-				" -oil of wood ....	15,	151	
cohol ....	15,	471		Taraxacin ....	18,	243	
solution of, in Ether	15,	471		<i>Taraxacum officinale</i> , resin of...	17,	453	
sources of....	15,	450		Tarragon-oil ....	14,	197	
specific gravity of				Tartar ....	10,	275	
aqueous ....	15,	463		" foliated earth of	8,	297	
Tannin....	15,	450		" crude ....	10,	276	
" artificial, of extract of				" oil of ....	2,	22	
Brazil-wood ....	11,	228		" purified ....	10,	276	
Tannomelanic acid ....	12,	412		" soluble....	10,	280	
Tannopic acid ....	15,	491		" vitriolised ....	3,	39	
Tannoxylic acid ....	12,	437		" -emetic....	10,	299	
Tansy-oil ....	14,	402		" -emetic, acid ....	10,	305	
Tantalates ....	4,	3		" -emetic ammoniacal	10,	298	
Tantalate of Alumina ....	4,	14		" -emetic, compound of,			
" Ammonia....	4,	8		with Cream of Tartar	10,	305	
" Baryta ....	4,	11		Tartaric acid ....	10,	265	
" Ferric oxide ....	5,	292		" amorphous ....	10,	326	
" Lime ....	4,	11		" aqueous, proportion			
" Potash ....	4,	9		of crystallised tar-			
" Silver-oxide ....	6,	182		taric acid in ....	10,	271	
" Soda ....	4,	10		" with Boracic acid	10,	272	



Tartaric acid, inactive ....	10, 369	Tartrate of Arsenious acid and	
„ copulated acids produced by ....	7, 227	„ Potash ....	10, 296
„ formation of racemic acid in the preparation of ....	10, 347	„ Arsenious acid and	
„ with nitric oxide ....	10, 272	„ Soda ....	10, 296
„ preparation of		„ Atropine ....	16, 455
„ formic acid from	7, 271	„ Baryta ....	10, 285
„ relation between		„ Baryta and Potash	10, 286
„ rotatory power		„ Baryta and Soda	10, 286
„ and molecular		„ Baryto-antimonic	10, 307
„ constitution of		„ of Benzidine ....	11, 341
	7, 65 ; 10, 365	„ Berberine ....	17, 196
Tartaric Anhydride ....	10, 336	„ Berberine and Anti-	
„ Ether ....	10, 343	„ mony ....	17, 196
„ Ether, formation of racemic acid from ....	10, 347	„ Bismuthic ....	10, 310
Tartarized Borax ....	10, 283	„ of Boracic acid and	
<i>Tartarus</i> ....	10, 275	„ Potash ....	10, 278
„ <i>ammoniatus</i> ....	10, 280	„ Boracic acid and	
„ <i>boraxatus</i> ....	10, 278, 283	„ Soda ....	10, 281
„ <i>crudus</i> ....	10, 276	„ Borax and Potash ...	10, 283
„ <i>depuratus</i> ....	10, 276	„ Brucine ....	17, 583
„ <i>emeticus</i> ....	10, 299	„ Cadmium ....	10, 311
„ <i>regeneratus</i> ....	8, 297	„ Calcio-antimonic	10, 308
„ <i>solubilis ammoniacalis</i>	10, 280	„ of Cerium ....	10, 291
„ <i>stibiatus</i> ....	16, 299	„ Chromium ....	10, 294
„ <i>tartarisatus</i> ....	10, 275	„ Cinchonidine	
Tartralic acid ....	10, 333		17, 227, 229, 614
Tartramie acid ....	10, 344	„ Cinchonidine and	
Tartramate of Ethyl ....	10, 344	„ Antimony ....	17, 614
Tartramide ....	10, 344	„ Cinchonine ....	17, 216
Tartrates ....	10, 272	„ Cinchonine, forma-	
Tartrate of Alumina ....	10, 291	„ tion of racemic acid	
„ Alumina and Ammo-		„ from ....	10, 347
„ nia ....	10, 292	„ Cinchonine and An-	
„ Alumina and Potash	10, 292	„ timony ....	17, 218, 610
Tartrates of Ammonia ....	10, 273	„ Cobaltoso-potassic	10, 320
Tartrate, Ammonio-antimonic	10, 298	„ of Codeine ....	17, 36
„ Ammonio-chromic	10, 294	„ Cupric ....	10, 320
„ Ammonio-ferric	10, 316	„ of Ethyl ....	10, 343
„ Ammonio-mercuric	10, 320	„ Glucina ....	10, 291
„ Ammonio-mercurous ...	10, 320	„ Guanine ....	10, 484
„ of Aniline ....	11, 263	„ Ferric ....	10, 314
„ Antimony ....	10, 297	„ Ferroso-ferric	10, 315
„ Antimony and Bru-		„ Ferrous ....	10, 313
„ cine ....	17, 584	„ of Furfurine ....	10, 382
„ Antimony and		„ Lanthanum	10, 291
„ Strychnine ....	17, 504	„ Lead ....	10, 312
„ Antimony and Ura-		„ Lead and Ammonium	10, 313
„ nium ....	10, 309	„ Lead and Antimony	10, 313
„ Argento-antimonic	10, 326	„ Lead and Chromium	10, 313
„ Argento-chromic	10, 326	„ Lead and Potassium	10, 313
„ of Arsenic acid and		„ Lime ....	10, 288
„ Potash ....	10, 296	„ Lime and Potash	10, 289
„ Arsenious acid ?	10, 296	„ Lime and Soda	10, 290
„ Arsenious acid and		„ Lithia ....	10, 285
„ Ammonia ....	10, 296	„ Lithia and Potash	10, 285
		„ Lithia and Soda	10, 285
		„ Lithio-antimonic	10, 307
		„ of Magnesia ....	10, 390
		„ Magnesia and Potash	10, 291

Tartrate of Magnesia and Soda	10, 291	Tartrate of Strychnine	.... 10, 503
„ Manganic ....	10, 296	„ Telluric ....	10, 309
„ Manganous ....	10, 296	„ of Tetravinylium	.... 13, 490
„ Mercuric ....	10, 323	„ Thebaine ....	18, 209
„ Mercurous ....	10, 322	„ Thorina ....	10, 292
„ Methylic ....	10, 343	„ „ and Potash	10, 292
„ Molybdic ....	10, 293	„ Titanic ....	10, 292
„ of Molybdic acid	10, 293	„ Uranic ....	10, 295
„ Molybdic acid and		„ Uranous ....	10, 295
„ Potash ....	10, 293	„ of Urea ....	13, 405
„ Molybdous ....	10, 293	„ Vanadic acid	10, 293
„ of Morphine ....	16, 435	„ Vanadium....	10, 293
„ Niccolopotassic	10, 320	„ Yttria ....	10, 291
„ of Nickel ....	10, 320	„ Zinc ....	10, 311
„ Nicotine ....	14, 232	„ „ and Potassium	10, 311
„ of Palladium....	10, 326	„ Zirconia ....	10, 292
„ Papaverine ....	18, 203	Tartrelic acid ....	10, 333
Tartrates of Potash	10, 275	Tartromethylic acid	10, 338
Tartrate of Potash, neutral, elec-		Tartronic acid ....	10, 345
trical properties of	1, 321	Tartrovinic acid	10, 340
„ Potash and Ammonia	10, 280	Tasmannite ....	17, 442
„ Potassio-antimonic	10, 299	Taste of organic compounds	.... 7, 66
„ Potassio-bismuthic	10, 310	<i>Tatia</i> ....	.... 5, 10
„ Potassio-cobaltous	10, 320	Taurine ....	9, 284
„ Potassio-cupric	10, 321	Taurochenocholic acid	18, 131
„ Potassio-ferric	10, 316	Taurocholic acid	18, 63
„ Potassio-ferrous	10, 316	Taurylic acid ....	11, 154
„ Potassio-manganous	10, 296	Taxine ....	18, 208
„ Potassio-mercuric	10, 324	Tea-oil ....	14, 402
„ Potassio-mercurous	10, 324	Tea-plant, resin of	17, 453
„ Potassio-molybdic	10, 293	Tea, preparation of caffeine or	
„ Potassio-molybdous	10, 293	theine from ....	13, 226
„ Potassio-niccolic	10, 320	Tekoretin ....	18, 346
„ Potassio-stannous	10, 311	Telerythrin ....	12, 376
„ Potassio-tantallic	10, 292	Telluramyl ....	11, 44
„ Potassio-telluric	10, 309	Tellurates ....	4, 403
„ Potassio-uranous	10, 296	Tellurate of Alumina	4, 425
„ Potassio-vanadic	10, 293	Tellurates of Ammonia....	4, 414
„ of Quinidine ....	17, 302	Tellurate of Chromic oxide	4, 426
„ Quinidine and Anti-		„ Cobalt-oxide	5, 353
mony ....	17, 302	„ Cupric oxide	5, 477
„ Quinidine and Potash	17, 302	„ Ferric ....	5, 312
„ Quinine ....	17, 291	„ Ferrous ....	5, 312
„ Quinine and Potash	17, 291	„ of Glucina ....	4, 425
„ Silver ....	10, 325	„ Lead-oxide	5, 178
„ Soda ....	10, 280	„ Lime ....	4, 424
„ Soda and Ammonia	10, 282	„ Lithia ....	4, 423
„ Soda and Potash	10, 282	„ Magnesia ....	4, 424
„ Sodio-antimonic	10, 307	„ Manganous oxide	4, 426
„ Sodio-cupric ....	10, 321	„ Mercuric oxide ....	6, 122
„ Stannous ....	10, 311	„ Mercurous oxide....	6, 121
„ of Stibmethylethylum	13, 503	„ Nickel-oxide	5, 393
„ Strontia ....	10, 286	Tellurates of Potash	4, 417
„ Strontia and Potash	10, 287	Tellurate of Silver-oxide	6, 193
„ Strontia and Soda	10, 287	Tellurates of Soda	4, 421
„ Strontio-antimonic	10, 307	Tellurate of Strontia	4, 424
„ Strontio - antimonic,		„ Thorina ....	4, 426
with Nitrate of		„ Uranic oxide	4, 426
Strontia ....	10, 308	„ Yttria ....	4, 425

Tellurate of Zirconia ....	4, 426	Tellurite of Mercurous oxide ....	6, 121
Tellurethyl ....	8, 383	"    Nickel-oxide ....	5, 393
Telluric acid ....	4, 400	Tellurites of Potash ....	4, 416
"    hydrochlorate ....	4, 413	Tellurite of Silver-oxide ....	6, 192
"    solubility of, in al-		Tellurites of Soda ....	4, 420
cohol ....	8, 270	Tellurite of Strontia ....	4, 424
Telluric Bismuth ....	4, 450	"    Telluric bromide ....	4, 411
"    Bromide ....	4, 410	"    "    chloride ....	4, 412
"    "    tellurite of ....	4, 411	"    "    fluoride ....	4, 413
"    Chloride ....	4, 412	"    "    iodide ....	4, 409
"    "    hydrochlorate		"    Thorina ....	4, 426
of ....	4, 413	"    Uranic oxide ....	4, 426
"    "    tellurite of ....	4, 412	"    Yttria ....	4, 425
"    Citrate ....	11, 454	"    Zinc-oxide ....	5, 51
"    Fluoride ....	4, 413	"    Zirconia ....	4, 426
"    "    tellurite of ....	4, 413	Tellurocyanide of Potassium ?	8, 125
"    Iodide ....	4, 408	Telluromethyl ....	10, 492
"    "    hydriodate of	4, 409	Tellurous acid ....	4, 397
"    "    tellurite of ....	4, 409	"    "    with fluxes ....	4, 422
"    Oxalate ....	9, 150	"    Bromide ....	4, 410
"    Nitrate ....	4, 413	"    Chloride ....	4, 411
"    Oxide ....	4, 397	"    Iodide ....	4, 408
"    Rhodizonate ....	10, 403	"    Sulphate ?	4, 407
"    Salts ....	4, 398	"    Sulphide ....	4, 405
"    Sulphate ....	4, 407	Tellurium ....	4, 393
"    Sulphide ....	4, 406	"    Alloys ....	4, 426
"    Tartrate ....	10, 309	"    Amalgam ....	6, 121
Telluride of Aluminum ....	4, 425	"    Biniodide, solubility	
"    Bismuth ....	4, 450	of in alcohol ....	8, 270
"    Copper ....	5, 477	"    Bromides ....	4, 410
"    Ethyl ....	8, 383	"    Chlorides ....	4, 411
"    Glucinum ....	4, 425	"    Fluorides ....	4, 413
"    Gold ....	6, 238	"    foliated ....	6, 245
"    "    and Silver ....	6, 250	"    graphic ....	6, 250
"    Hydrogen, solid ....	4, 404	"    Iodides ....	4, 408
"    Iron ....	5, 312	"    Oxides ....	4, 397
"    Lead ....	5, 177	"    -salts ....	2, 9
"    "    and Gold ?	6, 245	"    -salts, reaction of,	
"    Potassium ....	4, 416	with infusion of	
"    Silver ....	6, 192	galls ....	15, 467
"    "    auriferous ....	6, 250	"    Selenide ....	4, 408
"    Sodium ....	4, 420	"    Sulphides ....	4, 405
"    Tellurethyl ....	8, 387	"    Tetrasulphide ....	4, 406
"    Zinc ....	5, 51	"    white ....	6, 250
Tellurites ....	4, 400	"    and Silver, chloride of	6, 193
Tellurite of Alumina ....	4, 425	Temperature, change of, arising	
"    Ammonia ....	4, 414	from decomposition	
"    Chromic oxide ....	4, 426	tion ....	1, 133
"    Cobalt-oxide ....	5, 353	"    effect of, on the	
"    Cupric oxide ....	5, 477	solubility of sub-	
"    Ferric ....	5, 312	stances in water	2, 70
"    Ferrous ....	5, 312	"    influence of, on	
"    of Glucina ....	4, 425	combination ....	1, 36
"    Lead-oxide ....	5, 178	"    influence of, on	
Tellurites of Lime ....	4, 424	crystallisation ....	1, 8
"    Lithia ....	4, 422	"    influence of, on de-	
Tellurite of Magnesia ....	4, 424	composition ....	1, 116
"    Manganese ....	4, 426	"    scale of, used in	
"    Mercuric oxide ....	6, 121	this work ....	1, 8



Temperature of Space ....	1, 221	Terbromide of Allyl ....	13, 542
"    the Sun ....	1, 221	"    Antimony ....	4, 364
Tempering of Steel ....	5, 207	"    Arsenic....	4, 283
Templin oil ....	14, 242	"    Gold ....	6, 214
Tennant ....	1, 6	Terbromobenzene ....	11, 169
Tennantite ....	5, 492	Terbromocarbolic acid ....	11, 170
"    Arsenic in ....	4, 249	Terbromochloronaphthalin, Bi- drobromate ....	14, 73
Tension of the electric current of a battery, conditions determining the	1, 413, 417	Terbromocodeine ....	17, 39
"    of gases ....	1, 257; 2, 503	Terbromomesitylene ....	9, 19
Terbasic Arseniate of Cobalt- oxide ....	5, 349	Terbromonaphthalin ....	14, 33
"    Arseniate of Cupric oxide ....	5, 473	Terbromophenol ....	11, 170
"    Arseniate of Ferrous oxide ....	5, 305	Terbromophloroglucin ....	15, 68
"    Arseniate of Lead- oxide ....	5, 173	Terbromorcin ....	12, 356
"    Borate of Ethyl ....	8, 394	Terbromosalicylic acid ....	12, 291
"    Borate of Methyl ....	7, 294	Tercectylamine ....	16, 383
"    Cupric Acetate ....	8, 324	Terchloracetal ....	13, 478
"    Hyposulpharsenite of Potassium ....	4, 292	Terchloracetates ....	9, 211
"    Hyposulphate of Lead- oxide ....	5, 135	Terchloracetic acid ....	9, 209
"    Nitrate of Cupric ox- ide ....	5, 446	Terchloracetone ....	13, 465
"    Nitrate of Lead- oxide ....	5, 156	Terchloranethol ....	14, 215
"    Nitrate of Mercuric oxide ....	6, 74	Terchloraniline....	11, 285
"    Nitrite of Lead-oxide	5, 153	Terchlorothymol ....	14, 441
"    Phosphate of Baryta....	3, 144	Terchlorhydrin....	13, 577
"    Phosphate of Cobalt- oxide ....	5, 330	Terchlorhydrokinone ....	11, 195
"    Phosphate of Cupric oxide ....	5, 419	Terchlorhydroquinone, yellow	11, 196
"    Phosphate of Ferrous oxide ....	5, 224	Terchloride of Antimony ....	4, 365
"    Phosphate of Lead- oxide ....	5, 130	"    Antimony, action of, on glycol ....	13, 424
"    Phosphate of Potash....	3, 28	"    Antimony with Sal-ammoniac....	4, 374
"    Sulphantimonite of Lead ....	5, 176	"    Arsenic....	4, 285
"    Sulpharsenite of Am- monium ....	4, 288	"    Arsenic with Bi- chloride of Tin	5, 103
"    Sulphate of Ferric oxide ....	5, 242	"    Cacodyl....	13, 494
"    Sulphate of Mercuric oxide ....	6, 28	"    Glyceryl ....	13, 577
Terbenzoate of Glycerin or of Glycyl ....	12, 105	"    Gold ....	6, 215
Terbium and Erbium ....	3, 291	"    Gold, compound of, with Cyanide of Ethyl ....	13, 457
Terborate of Magnesia....	3, 231	"    Gold, compound of, with Cyanide of Methyl ....	13, 412
"    Potash ....	3, 26	"    Iodine ....	2, 348
Terbromanethol ....	14, 215	"    Iridium....	6, 381
Terbromaniline....	11, 280	"    Iridium and Po- tassium?	6, 387
Terbromhydrin....	13, 575	"    Manganese? ....	4, 229
		"    Osmium? ....	6, 413
		"    Osmium and Am- monium ....	6, 416
		"    Phosphorus ....	2, 328
		"    Phosphorus, action of, on alcohols, ethers, acids, &c.	10, 487
		"    Phosphorus, com- pounds of, with Cyanide of Me- thyl ....	13, 411

Terchloride of Phosphorus with				Terebene	Hydrochlorate with		
Stannic Chloride	5,	90			Bi-hydrochlorate of		
„ Sulphur	2,	334			Turpentine oil	14,	275
„ Sulphur, sulphate				„ Hydriodates	14,	276	
of	2,	342		Terebentic acid	14,	255	
„ Tantalum	4,	6		Terebentic acid	13,	118	
„ Tantalum, tanta-				Terebenzic acid	16,	183	
late of ?	4,	6		Terebic acid	12,	467	
„ Tungsten	4,	35		Terebilates of Methyl, Ethyl,			
„ Vanadium	4,	95		and Amyl	12,	469	
Terchlorinated Ethylic Sulphide	10,	514		Terebilate of Silver	12,	465	
„ Hydrochloric				Terebilene	14,	280	
ether	9,	199		Terebilic acid	12,	467	
„ Methyl-ether	7,	354		Terechrysic acid	11,	424	
„ Methylic Sul-				Terephthalate of Silver	13,	14	
phide	7,	355		Terephthalic acid	13,	13	
„ Sulphosomethylic				Terfluoride of Antimony	4,	371	
acid	7,	351		„ Arsenic	4,	286	
Terchloriodide of Tetramethy-				„ Chromium with			
lium	12,	491		Ammonia	4,	143	
Terchlorobenzene	11,	180		„ Vanadium	4,	96	
Terchlorobromonaphthyl, bro-				Terhydrated Chinoline...	13,	248	
mise of, <i>see</i> Bibromoterchloro-				„ Hydrochlorate of			
naphthalin	14,	80		Ferrous oxide	5,	252	
Terchlorocarbates	11,	183		„ Silicate of Magnesia	3,	396	
Terchlorocarboic acid	11,	181		Terhydrochlorate of Arsenious			
Terchlorochinone	11,	193		acid	4,	285	
Terchloroenanthol	12,	470		„ Auric oxide	6,	216	
Terchlorofilicic acid	16,	129		„ Bismuth-			
Terchlorokinhydrone	11,	196		oxide	4,	439	
Terchlorokinone	11,	193		„ Ferric oxide	5,	254	
Terchloromesitylene	9,	19		„ Quintichlo-			
Terchloromethylic Acetate	9,	232		rotoluol...	12,	293	
Terchloromethylsulphite of Cya-				Terhydrocyanate of Ferric oxide	7,	449	
nethine	13,	237		Terhydrofluatate of Ferric oxide...	5,	256	
Terchloronaphthalins	14,	49		„ Silica	3,	366	
Terchloronaphthalin, Bi-hydro-				„ Titanic oxide	3,	482	
chlorate of	14,	56		Teriodide of Antimony...	4,	362	
Terchloronaphthalin, Hydrochlo-				„ Arsenic	4,	281	
rate of	14,	55		„ Bismuth	4,	437	
Terchloronaphthyl Chloride, <i>see</i>				„ Gold	6,	213	
Quadrochloronaphthalin	14,	59		„ Tellurium	4,	409	
Terchlorophenol	11,	181		„ Tetramethylum	12,	490	
Terchlorophthalic acid	13,	17		„ Tetrethylum	9,	67	
Terchlorophthalic anhydride	13,	18		„ Triethylmethylum	13,	485	
Terchloropteritannic acid	15,	502		„ Trimethylamylum	13,	485	
Terchloroquinone	11,	193		„ Trimethylethylum	13,	484	
Terchlorosulphonaphthalates	14,	54		Teriodomesitylene	9,	19	
Terchlorotannaspidic acid	15,	498		<i>Termina vernix</i> , balsam obtained			
Terchlorotoluol, hydrochlorate...	12,	292		from	17,	394	
Terchlorovalerates	11,	103		Termolybdate of Potash	4,	70	
Terchlorovalerianic acid	11,	103		Ternaphthylphosphamide	14,	129	
Terchlorovinic acetate	9,	237		Ternitracetonitrile	12,	547	
Terchromate of Chromic oxide...	4,	116		„ preparation			
Tereyanide of Gold	8,	36		of Nitro-			
Terebene	14,	273		form from	12,	493	
„ <i>see</i> Camphilene.				Ternitramarine...	12,	198	
„ Hydrobromates	14,	276		Ternitranisic acid	13,	143	
„ Hydrochlorate	14,	274		Ternitranisol	12,	265	

Ternitranisol, preparation of Pi- cric acid from ....	11, 214	Tersulphide of Phosphorus ....	2, 215
Ternitrate of Bismuth-oxide ....	4, 443	"    Potassium ....	3, 33
Ternitrocarbolic acid ....	11, 211	"    Tellurium ....	4, 406
Ternitrocellulose ....	15, 166	"    Tungsten ....	4, 33
Ternitrocresylic acid ....	11, 228	Tesselite ....	3, 393
Ternitrogentianic acid ....	16, 182	Tesseral pyrites ....	5, 349
Ternitrohydrobenzamide ....	12, 197	<i>Tetracarbure quadrihydrique</i> of Couverbe ....	11, 2
Ternitromesitylene ....	9, 22	Tetracetosylum ....	13, 488
Ternitromesitylol ....	13, 347	Tetracetylum ....	13, 488
Ternitromethyl, hydride ....	12, 493	Tetrachloracetone ....	13, 465
"    iodide ....	12, 493	Tetrachloride of Arsenmethyl ....	13, 499
Ternitronaphthalin ....	14, 88	Tetrachlorinated Ethylic sulphide	10, 514
Ternitrophenol ....	11, 211	Tetrachloriodide of Tetramethy- lium ....	12, 490
Ternitrophenyl, benzoate ....	12, 91	Tetrachlorocinnamyl ....	13, 298
Ternitrophoretol ....	13, 317	Tetrachloronaphthalin ....	14, 59
Ternitrothymol ....	14, 445	Tetradecatyl hydride ....	16, 533
Teropiammone ....	14, 436	Tetradymite ....	4, 450
Teroxide of Gold ....	6, 207	Tetrafluoride of Antimony ....	4, 371
"    Iridium ....	6, 375	Tetrallylarsonium ....	13, 548
"    Iridium with Potash	6, 384	Tetrallylium ....	13, 547
"    Osmium ....	6, 407	Tetramethylammonium ....	7, 320
"    Osmium with Potash	6, 417	Tetramethylum ....	7, 320
Teroxygenated Chlorine (Sta- dion's) ....	2, 309	"    Chloriodides ....	12, 490
Terpalmitin ....	16, 377	"    Deca-iodide ....	10, 498
Terpin ....	14, 258	"    Iodides ....	12, 490
Terpinol ....	14, 264	"    Mercury - com- pounds ....	13, 395
<i>Terra foliata tartari</i> ....	8, 297	"    Penta-iodide....	10, 498
" <i>foliata tartari crystallis-</i> <i>abilis</i> ....	8, 299	Tetramethylphosphonium ....	12, 492
" <i>ponderosa</i> ....	3, 134	Tetramylamine....	11, 112
<i>Terræ absorbentes</i> ....	3, 133	Tetramylammonium ....	11, 112
Tersaccharides ....	15, 318	Tetranitrocellulose ....	15, 167
Terselenite of Ferric oxide ....	5, 247	Tetraphyline ....	5, 302
Tersilicate of Alumina ....	3, 418	Tetrasilicate of Manganous ox- ide ....	4, 244
"    Ferric oxide ....	5, 282	"    Potash ....	3, 371
"    Lime ....	3, 389	"    Soda ....	3, 376
"    Soda ....	3, 376	Tetrasulphide of Ammonium ....	2, 452
Tersulphuric acid ....	2, 162	"    Antimony ? ....	4, 354
Tersulphate of Antimonic oxide	4, 361	"    Ethylene ....	8, 354
"    Bismuth-oxide....	4, 435	"    Osmium ....	6, 411
"    Ferric oxide ....	5, 244	"    Potassium ....	3, 33
"    Uranic oxide ....	4, 177	"    Tellurium ....	4, 406
"    Vanadic acid ....	4, 94	Tetrathionates ....	2, 166
Tersulphide of Antimony, amor- phous ....	4, 340	Tetrathionate of Lead-oxide ....	5, 135
"    Antimony with Pentachloride of Antimony ....	4, 370	"    Potash ....	3, 37
"    Barium ....	3, 149	"    Silver-oxide ....	6, 153
"    Bismuth ....	4, 435	"    Soda ....	3, 99
"    Chromium with Hydrosulphate of Ammonia ....	4, 142	"    Stannous oxide	5, 81
"    Gold ....	6, 210	"    Strontia ....	3, 174
"    Iridium ....	6, 377	"    Zinc-oxide ....	5, 21
"    Methyl....	7, 330	Tetrathionic acid ....	2, 164
"    Osmium ....	6, 411	Tetrathionic acid, action of, on Mercury salts ....	6, 27
		Tetravinylum ....	13, 488
		Tetrellallylammonium ....	13, 488
		Tetrethylammonium ....	9, 65



Tetrethylene-biammonium ....	13, 486	Thiocinol ....	13, 278
Tetrethylum ....	9, 65	Thiocyanides ....	8, 114
„ Hydrated oxide....	9, 66	Thiocyanide of Tin ....	8, 114
„ Mercury - com- pounds of ....	13, 482	Thioformic acid ....	12, 479
„ and Mercury, io- dides of ....	13, 483	Thiofucusol ....	10, 374
„ salts of ....	9, 67	Thiofurfol ....	10, 374
Tetrethylphosphonium....	12, 526	Thiomelanic acid ....	8, 240
Tetrethylurea ....	9, 291	Thionaphthamates ....	14, 115
Tetryl, <i>see</i> Butyl.		Thionaphthyl, oxide of, <i>see</i> Sul- phonaphthalin. ....	14, 28
Teucrium bitter ....	18, 243	Thionessal ....	12, 188
<i>Teucrium marum</i> , camphor of....	14, 364	Thionuric acid ....	10, 183
Texture of crystals ....	1, 18	Thiosalicol ....	12, 274
Thakcetone ....	9, 12	Thiosinethylamine ....	10, 61
Tharandite ....	3, 253	Thiosinethylammonium, iodide....	10, 62
Thea, oil of various species of ....	17, 99	Thisosinnamine ....	10, 57
Thebaicine ....	18, 211	Thiotolamates ....	12, 344
Thebaine ....	17, 167; 18, 208	Thiotolamic acid ....	12, 343
Thebenine ....	18, 210	Thiotoluol ....	12, 283
Theine ....	13, 224	Thomsonite ....	3, 433
Thénard ....	1, 6	Thorina ....	3, 330
Thenardite ....	3, 100	„ Acetate ....	8, 305
<i>Theobroma Cacao</i> , butter from the seeds of ....	16, 387	„ Arseniate ....	4, 310
Theobromine ....	12, 471	„ Borate ....	3, 332
Thermography ....	1, 179	„ Carbonate ....	3, 332
Thermometers ....	1, 235	„ Chromate ....	4, 155
Thermometer scales, Centigrade and Fahrenheit table of ....	2, 500	„ Citrate ....	11, 452
„ scales, comparison of ....	1, 237; 2, 500	„ with Fluxes ....	3, 336
Therythrine ....	9, 12	„ Formiate ....	7, 279
Theveresin ....	18, 251	„ Hydrate ....	3, 331
Thevetin ....	18, 251	„ Molybdate ....	4, 78
Thiacetate of Acetyl ....	9, 356	„ Nitrate ....	3, 335
„ Ethyl ....	9, 356	„ Oxalate ....	9, 135
„ Othyl ....	9, 356	„ Phosphate ....	3, 332
Thiacetates, metallic ....	13, 448	„ -salts ....	3, 332
Thiacetic acid ....	9, 355; 13, 446	„ Silicate ....	3, 463
„ acid, anhydrous ....	9, 356	„ Succinate ....	10, 122
„ acid, reaction of, with Aniline ....	13, 450	„ Sulphate ....	3, 333
Thiacetonine ....	9, 14; 13, 378	„ Tartrate ....	10, 292
Thialdine ....	9, 313	„ Tellurite and Tellurate ....	4, 426
„ action of ethyl iodide and amyl iodide on....	12, 554	„ Tungstate ....	4, 45
„ action of methyl iodide on ....	12, 554	„ Vanadiates ....	4, 103
„ preparation of leucine from ....	11, 429	„ and Ammonia, carbonate ....	3, 335
Thianisol? ....	13, 131	„ and Potash, carbonate....	3, 335
Thianylanisamide ....	14, 145	„ and Potash, nitrate ....	3, 336
Thimble apparatus, Wollas- ton's ....	1, 408	„ and Potash, oxalate ....	9, 136
Thiobenzaldin ....	12, 214	„ and Potash, sulphate ....	3, 335
Thiobenzamide....	12, 148	„ and Potash, tartrate ....	10, 292
		Thorinum ....	3, 330
		„ Bromide ....	3, 334
		„ Chloride ....	3, 334
		„ Ferrocyanide ....	7, 486
		„ Fluoride ....	3, 335
		„ Oxide ....	3, 330
		„ Oxy-chloride ....	3, 335
		„ Phosphide ....	3, 332
		„ Sulphide ....	3, 333
		„ and Potassium, bro- mide ....	3, 336

Thorinum and Potassium, chlo- ride .... 3, 336	Tin Chlorides .... 5, 84
„ and Potassium, fluo- ride .... 3, 336	„ Chlorosulphide .... 5, 90
Thorite.... 3, 463	„ Cobaltidcyanide .... 7, 495
„ preparation of thorina from .... 3, 330	„ Cuprocyanide .... 8, 7
Three-fourths Iodide of Mercury 6, 35	„ Ethyl-compounds containing 9, 91
„ Phosphate of Lime 3, 195	„ Fluorides .... 5, 92
„ Silicate of Mag- nesia .... 3, 397	„ Hydrated Sesquisulphide .... 5, 79
<i>Thuja articulata</i> , resin of ... 17, 429	„ Hydrochlorate of Sesqui- oxide .... 5, 87
„ <i>occidentalis</i> , jelly from.... 13, 240	„ Iodides .... 5, 82
„ <i>occidentalis</i> , pinipierin in the needles of .... 16, 26	„ Iodochloride .... 5, 91
„ <i>occidentalis</i> , wax of .... 18, 163	„ Malate .... 10, 222
Thuja oil .... 16, 246	„ Meconate .... 12, 428
Thujetic acid .... 16, 244	„ Osmiate ? .... 6, 421
Thujetin .... 16, 244	„ Oxides .... 5, 68
Thujigenin .... 16, 242	„ Peroxide .... 5, 71
Thujin .... 15, 349 ; 16, 245	„ Phosphide.... 5, 77
<i>Thus</i> .... 17, 427	„ Protiodide .... 5, 82
Thymeïd .... 15, 38	„ Protobromide .... 5, 84
Thymene .... 14, 311	„ Protochloride .... 5, 84
Thymoïl .... 15, 36	„ Protosalts .... 5, 69
Thymoïlamide .... 15, 38	„ Protosulphide .... 5, 78
Thymoïlic acid .... 15, 37	„ Protoxide .... 5, 68
Thymoïlol .... 15, 35	„ Pyromucate .... 10, 385
Thymol.... 14, 408	„ Selenide .... 5, 82
„ oil from .... 13, 346	„ Sesquioxide .... 5, 70
Tin .... 5, 66	„ Sesquisulphide .... 5, 79
„ Acetates .... 8, 310	„ Silicide .... 5, 100
„ Alloys .... 5, 105	„ Silicofluoride .... 5, 100
„ Amalgam .... 6, 124	„ Suberate .... 13, 210
„ Ammonio-bichloride .... 5, 93	„ Succinates.... 10, 124
„ Ammonio-protiodide .... 5, 93	„ Thiocyanide .... 8, 114
„ Ammonio-protochloride .... 5, 93	„ Xanthate .... 8, 457
„ Antimonide .... 5, 103	„ and Bismuth, alloys .... 5, 104
„ Arsenide .... 5, 102	„ and Bismuth, amalgam .... 6, 126
„ Aurocyanide .... 8, 42	„ Bismuth and Antimony, alloy .... 5, 104
„ Benzoate .... 12, 41	„ Bismuth and Lead, alloys 5, 180
„ Bibromide.... 5, 84	„ and Iron, carbide.... 5, 315
„ Bichloride.... 5, 89	„ and Cobalt, alloy .... 5, 354
„ Bichloride with Bitter Almond oil .... 12, 28	„ and Copper, alloys .... 5, 481
„ Bichloride, compound of, with Cyanide of Ethyl .... 13, 457	„ and Gold, alloy .... 6, 239
„ Bichloride, compound of, with Cyanide of Methyl.... 13, 412	„ and Iridium, alloy .... 6, 391
„ Bichloride, expansion of, by heat .... 1, 226, 229	„ and Iron, alloy .... 5, 314
„ Bichloride with Terehlo- ride of Arsenic .... 5, 103	„ and Iron, cyanides .... 7, 490
„ Biniodide .... 5, 83	„ and Lead, alloys .... 5, 179
„ Binoxide .... 5, 71	„ and Lead, amalgam .... 6, 127
„ Bisulphide .... 5, 79	„ and Lead, antimonide .... 5, 180
„ Bromides .... 5, 84	„ Lead, and Bismuth, amal- gam .... 6, 128
„ Butter of .... 5, 84	„ Lead, Copper, and Zinc, alloy .... 5, 488
„ Camphorate .... 14, 461	„ and Mercury, chloride .... 6, 125
	„ and Nickel, alloy .... 5, 394
	„ and Palladium, alloy .... 6, 357
	„ and Platinum, alloy .... 6, 335
	„ and Potassium, alloy .... 5, 95
	„ and Silver, alloy .... 6, 194
	„ and Sodium, alloy .... 5, 98

Tin and Sulphur, chloride ....	5, 90	Titanium Alloys ....	3, 488
„ and Zinc, alloys ....	5, 105	„ Ammonio-chloride ....	3, 483
„ and Zinc, amalgam ....	6, 126	„ Bichloride ....	3, 481
„ Zinc and Lead, alloys ....	5, 181	„ Bichloride, expansion	
<i>Tinctura Cæinæ</i> , deposition of		of, by heat	1, 226, 229
cæincin from....	18, 144	„ Bifluoride ....	3, 482
Tinkal ....	3, 87	„ Bifluoride with	
Tinned iron plate ....	5, 314	sesquifluoride of	
Tinning by galvanic precipita-		iron ....	5, 292
tion ....	1, 501	„ Chlorides ....	3, 479
Tin-plate ....	5, 314	„ Chloride, compound	
„ -pyrites ....	5, 66, 496	of, with cyanide of	
„ -refuse ....	5, 67	ethyl ....	13, 457
„ -salt ....	5, 85	„ Chloride, compound	
„ -salts, solubility of, in al-		of, with cyanide of	
cohol....	3, 270	methyl ....	13, 412
„ -scum ....	5, 67	„ Chloride with hy-	
„ -stone ....	5, 66, 71	drochloric acid ....	3, 481
„ -white Cobalt ....	5, 348	„ Chloride with phos-	
Titanates ....	3, 476	phuretted hydro-	
Titanate of Ammonia ....	3, 483	gen ....	3, 480
„ Ferric oxide ....	5, 297	„ Cyanide? ....	7, 418
„ Ferrous oxide ....	5, 289	„ Ferrocyanide ....	7, 486
„ Manganous oxide ....	4, 245	„ Fluoride ....	3, 482
Titanates of Potash ....	3, 484	„ Nitrocyanide	3, 488; 7, 418
Titanate and Silicate of Lime ....	3, 488	„ Oxides ....	3, 469
„ and Silicate of Potash	3, 487	„ Oxy-fluoride ....	3, 482
Titanates of Soda ....	3, 485	„ Phosphide ....	3, 476
Titanate of Zirconia ....	3, 487	„ Sulphide ....	3, 477
Titanic Acetate....	8, 305	„ and Ammonium, chlo-	
„ Acid ....	3, 471	ride ....	3, 484
„ Acid, hydrate ....	3, 475	„ and Ammonium, fluo-	
„ Arseniate ....	4, 311	ride ....	3, 484
„ Chloride ....	3, 481	„ and Calcium, fluor-	
„ Chloride, hydrocyanate		ide ....	3, 487
of ....	8, 148	„ and Copper, hydrated	
„ Hydrochlorate ....	3, 480	fluoride ....	5, 466
„ Nitrate....	3, 483	„ and Cyanogen, chlor-	
„ Oxalate ....	9, 136	ide ....	8, 146
„ Oxide ....	3, 471	„ and Lead, fluoride ....	5, 166
„ Oxide with Fluxes	3, 486	„ and Magnesium,	
„ Phosphate ....	3, 477	fluoride ....	3, 487
„ Phosphite ....	3, 477	„ and Potassium, fluor-	
„ Rhodizonate ....	10, 402	ide ....	3, 485
„ Salts ....	3, 475	„ and Sodium, fluoride	3, 486
„ Sulphates ....	3, 478	„ and Sulphur, chloride	3, 481
„ Sulphite ....	3, 478	Titanous oxide....	3, 469
„ Terhydrofluat....	3, 482	Tobacco camphor ....	14, 232
„ Tannate ....	15, 466	„ empyreumatic oil of ....	14, 234
„ Tartrate ....	10, 292	„ estimation of nicotine	
Titanide of Iron? ....	5, 289	in ....	14, 223
Titaniferous Iron ....	5, 289	„ occurrence of nicotine	
„ Schorl ....	3, 466, 474	in ....	14, 220
Titanite ....	3, 488	„ -seed oil ....	16, 314
Titanio-ammonic Carbonate	3, 483	Tolene ....	14, 312
„ -potassic Carbonate	3, 485	Tole ....	12, 226
„ „ Sulphate ....	3, 485	Tolu Balsam ....	17, 392
„ -sodic Carbonate ....	3, 486	„ preparation of cin-	
Titanium ....	3, 465	namic acid from	13, 270



Tolu Balsam, preparation of		Tridecatyl hydride	.... 16, 532
toluene from	.... 12, 227	Triethamylamine	.... 11, 111
resins from	.... 13, 290	Triethaniline	.... 11, 308
Toluate of Eugenyl	.... 14, 212	Triethyl, Biplumbic	.... 13, 511
Toluene	.... 12, 226	Bistannic	.... 13, 507
Tolu-eugenyl	.... 14, 212	Triethylamine	.... 9, 65; 12, 521
Toluidine	.... 12, 333	Triethylamylammonium	.... 11, 111
Toluo-eugenic anhydride	.... 14, 212	Triethylamylphosphonium	.... 12, 529
Toluol	.... 12, 226	Triethylaniline	.... 11, 308
Toluol-sulphuric acid	.... 12, 230	Triethylmethylium, teriodide	.... 13, 485
Toluylic acid	.... 13, 8	Triethylphosphine	12, 521; 10, 488
Tombac	.... 5, 480	Triethyltoluidine	.... 12, 341
Tonka-beans, preparation of		<i>Trifolium fibrinum</i> , ferment-oil	
cumarin from	.... 13, 322	of	.... 14, 407
Tonka-camphor	.... 13, 321	Trigenate of Silver	.... 9, 312
Topaz	.... 3, 419	Trigenic acid	.... 9, 311
Brazilian, electric pro-		Triklasite, scaly	.... 3, 431
perties of	.... 1, 320	Trimethylamine	.... 7, 320; 9, 505
Top-yeast	.... 15, 268	occurrence of, in	
Torfic acid	.... 17, 474	the animal or-	
Torfocrenic acid	.... 17, 475	ganism	.... 13, 395
Torfoxyrenic acid	.... 17, 475	Trimethylamylum, teriodide	.... 13, 485
Tormentil-root	.... 17, 453	Trimethylamylphosphonium	.... 12, 529
wax of	.... 18, 164	Trimethylethylum, pentaoidide	13, 484
kinovic acid in	18, 24	teriodide	.... 13, 484
Torpedo, electricity of	.... 1, 429	Trimethyl-iodethylammonium,	
Torricelli	.... 1, 4	iodide	.... 18, 381
Torricellian vacuum, electric in-		Trimethyl-oxethylammonium,	
sulation by the	.... 1, 312	hydrate	.... 18, 381
Torrefaction	.... 1, 271	Trimethylphosphine	.... 12, 491
<i>Torvula cerevisiæ</i>	.... 7, 110; 15, 265	Trimethyl-vinylammonium, hy-	
Toughened copper	.... 5, 399	drate	.... 18, 381
Toulourou oil	.... 16, 322	Trimorphism	.... 1, 18, 98
Tourmaline	.... 3, 454	<i>Trinitrite hydraté d'Anthra-</i>	
Tourmalines, electrical properties		cénise	.... 16, 166
of	.... 1, 320	Trinitrocellulose	.... 15, 116
Train oil	.... 16, 321	Triolein	.... 17, 85
of the Doebling	.... 17, 180	Trioxypotein	.... 18, 264
Transformation from amorphous		Tripalmitin	.... 16, 377
to crystalline state	.... 1, 103	Triphane	.... 3, 444
Transparency	.... 1, 164	Triphenylamine	11, 334; 13, 305
of compounds	.... 1, 94	Triphocenin	.... 11, 76
Trehalose	.... 15, 299	Triphosphate of Ammonia	.... 2, 441
Tremolite	.... 3, 405	Lime	.... 3, 192
Triacetin	.... 9, 497	Lime with Chlo-	
Triallylamine	.... 13, 547	ride or Fluoride	
Triamylamine	.... 11, 109	of Calcium	.... 3, 219
Trianospermine	.... 18, 211	Magnesia	.... 3, 232
Trianospermitine	.... 18, 212	Nickel-oxide	.... 5, 369
Triarachin	.... 17, 374	Silver-oxide	.... 6, 148
Triarsenide of Nickel	.... 5, 388	Uranic oxide	.... 4, 171
Tribasic phosphate of soda	.... 3, 90	Zinc-oxide	.... 5, 17
Tribenzoic acid	.... 12, 105	Triphosphethylamine	.... 10, 488
Tribenzylamine	.... 12, 148	Triphosphide of Cobalt	.... 5, 329
Tribromo-hydrocarotin	.... 17, 55	Copper	.... 5, 416
Tribromopropylaldehyde	.... 9, 428	Nickel	.... 5, 368
Tributyryl	.... 10, 96	Triphosphomethylamine	.... 10, 489
Tricetylamine	.... 16, 383	Triphyline	.... 5, 301, 303
Tricumylamine	.... 19, 508	weathered	.... 5, 303

Triplite ....	5, 301	Tungstate of Cobalt-oxide ....	5, 346
„ of Bodenmais ....	5, 303	„ Cupric oxide ....	5, 466
Trisarsenate of Ammonia ....	4, 287	„ Ferrous oxide ....	5, 294
„ Baryta ....	4, 300	„ Lead-oxide ....	5, 166
„ Lime ....	4, 304	„ Lime ....	4, 44
„ Potash ....	4, 291	„ Lithia ....	4, 42
„ Soda ...	4, 295	„ Magnesia....	4, 45
„ Zinc-oxide ....	5, 49	„ Manganous oxide	4, 246
Trisilicate of Manganic oxide ....	4, 244	„ Mercuric oxide ....	6, 111
„ Yttria ....	3, 509	„ Mercuric oxide and	
Tristearin, decompositions of ....	17, 121	Ammonia ....	6, 111
„ isomeric modifications		„ Mercurous oxide....	6, 111
of ....	7, 244; 17, 119	„ Molybdic oxide ....	4, 79
„ preparation of ....	17, 118	„ Molybdic oxide and	
„ properties of ....	17, 118	Ammonia ....	4, 79
„ saponification of	17, 104, 122	„ Nickel-oxide ....	5, 386
Trisulphate of Mercuric oxide		„ Potash ....	4, 38
with Mercuric		„ Potash and Ammo-	
Amide ....	6, 79	nia ....	4, 40
„ of Mercurous ox-		„ Potash with Fluo-	
ide with Mer-		ride of Tungsten	
curous Amide?	6, 78	and Potassium ....	3, 46
„ of Yttria....	3, 287	„ Potash with Sul-	
Trithionates ....	2, 167	photungstate of	
Trithionate of Baryta ....	3, 150	Potassium ....	4, 46
„ Lead-oxide ....	5, 135	„ Silver-oxide ....	6, 182
„ Potash ....	3, 37	„ Soda ....	4, 40
„ Silver-oxide ....	6, 153	„ Soda with Fluoride	
„ Soda ....	3, 99	of Tungsten and	
„ Zinc-oxide ....	5, 21	Sodium....	4, 47
Trithionic acid....	2, 166	„ Stannous oxide ....	5, 100
„ acid, action of, on		„ Strontia ....	4, 43
Mercury-salts ....	6, 27	„ Tersulphide of	
Tritylamine ....	9, 411	Tungsten ....	4, 34
Trityl-compounds, <i>see</i> Propyl-		„ Thorina ....	4, 45
compounds.		„ Tungstic bromide	4, 34
Tritylic alcohol ....	9, 398	„ Tungstic chloride	4, 36
Trivalerin ....	11, 76	„ Tungstous oxide	
Trivaniline ....	11, 308	and Potash ....	4, 45
Trombolite ....	5, 419	„ Tungstous oxide	
Trona ....	3, 83	and Soda ....	4, 46
Tropæolum, <i>see</i> Nasturtium. ....	14, 385	„ Uranic oxide ....	4, 192
<i>Tropæolum majus</i> , sudden emis-		„ Uranous oxide ....	4, 192
sion of light by the flowers		„ Vanadic oxide ....	4, 104
of ....	1, 178	„ Yttria ....	4, 45
Tropine ..	16, 457	„ Zinc-oxide ....	5, 47
Trough battery, development of		Tungsten (metal) ....	4, 24
heat in the troughs of ....	1, 496	„ (mineral) ....	4, 44
Truffles, acrid resin of ....	17, 453	„ Alloys ....	4, 47
„ fatty oil of ....	17, 99	„ Bichloride ....	4, 31
Tschornosem, or Russian black		„ Bisulphide ....	4, 32
earth, humous acids from ....	17, 473	„ Chlorides ....	4, 35
Tulic acid ....	17, 474	„ Fluoride ....	4, 37
Tungstates ....	4, 29	„ Oxides ....	4, 25
Tungstate of Alumina ....	4, 45	„ Oxybromide....	4, 34
„ Ammonia ....	4, 37	„ Phosphide ....	4, 32
„ Baryta ....	4, 43	„ Sulphides ....	4, 32
„ Cadmic oxide ....	5, 65	„ Terchloride ....	4, 35
„ Chromic oxide ....	4, 156	„ Tersulphide ....	4, 33

Tungsten Tersulphide, tungstate of ....	4, 34	Turpentine - oil, brominated ....	14, 437
„ and Ammonium, fluoride of ....	4, 38	„ -oil, chlorinated ....	14, 439
„ and Copper, alloy of ....	5, 466	„ -oil, compounds of, with Oxygen ....	14, 256
„ and Gold, alloy of ....	6, 237	„ -oil, compounds of, with Water ....	14, 258
„ and Iron, carbide of....	5, 297	„ -oil, decomposition of, by Acetic acid ....	14, 251
„ and Platinum, alloy of	6, 331	„ -oil, decomposition of, by Ammonia gas ....	14, 251
„ and Potassium, fluoride of, with Tungstate of Potash ....	4, 46	„ -oil, decomposition of, by atmospheric oxidation....	14, 245
„ and Silver, alloy of....	6, 182	„ -oil, decomposition of, by Boracic acid ....	14, 251
„ and Sodium, fluoride of, with Tungstate of Soda ....	4, 47	„ -oil, decomposition of, by Bromine ....	14, 248
Tungstic Acid ....	4, 26	„ -oil, decomposition of, by Carbonic acid ....	14, 251
„ Acid with Fluxes ....	4, 42	„ -oil, decomposition of, by Chlorate of Potash ....	14, 254
„ Acid, hydrochlorate, of	4, 37	„ -oil, decomposition of, by Chloride of Ammonium ....	14, 254
„ Acid, nitrate of ....	4, 37	„ -oil, decomposition of, by Chloride of Barium ....	14, 254
„ Acid, sulphate of ? ....	4, 34	„ -oil, decomposition of, by Chloride of Calcium ....	14, 254
„ Bromide, Tungstate of	4, 34	„ -oil, decomposition of, by Chloride of Strontium ....	14, 254
„ Chloride ....	4, 35	„ -oil, decomposition of, by Chlorine gas ....	14, 248
„ Chloride, Tungstate of	4, 36	„ -oil, decomposition of, by Chlorochromic acid ....	14, 253
„ Oxide....	4, 25	„ -oil, decomposition of, by Citric acid ....	14, 251
Tungstide of Lead ....	5, 166	„ -oil, decomposition of, by the electric spark ....	14, 246
Tungstous Chloride ....	4, 35	„ -oil, decomposition of, by Fluoride of Boron ....	14, 252
„ Oxide ....	4, 25	„ -oil, decomposition of, by Fluoride of Calcium ....	14, 254
„ Oxide and Potash, tungstate of ....	4, 45	„ -oil, decomposition of, by Fluoride of Silicium ....	14, 252
„ Oxide and Soda, tungstate of ....	4, 46	„ -oil, decomposition of, by heat ....	14, 246
Tunicin....	15, 181	„ -oil, decomposition	
„ formation of Dextroglucose from ....	15, 309		
Turacin ....	18, 419		
Turmeric, effect of sunshine on the colour of ....	7, 95		
„ -yellow, resinous ....	16, 518		
Turnbull's Blue ....	7, 435		
Turnip oil ....	17, 554		
Turnip-stemmed Cabbage, oil of	17, 554		
Turpentine of Bordeaux ....	18, 19		
„ Canada ....	18, 19		
„ Carolina ....	18, 19		
„ commercial English	18, 19		
„ common ....	18, 14		
„ of Strasburg ...	18, 17		
„ of Venice ....	18, 18		
„ -camphor ....	14, 258		
„ -camphor, aqueous	14, 263		
„ -camphor, crystallised ....	14, 262		
„ -camphor, liquid ....	14, 263		
„ -oil ....	14, 239		
„ -oil, adulteration of expensive oils with	7, 162		
„ -oil, Bihydrochlorate of, with Hydrochlorate of Terebene	14, 275		



of, by Hydriodic acid ....	14, 252	Turpentine - oil, Hydriodate ....	14, 269
Turpentine - oil, decomposition of, by Hydrobromic acid ....	14, 252	„ -oil, Hydrobromate ....	14, 269
„ -oil, decomposition of, by Hydrochloric acid ....	14, 252	„ -oil, Hydrochlorate ....	14, 265
„ -oil, decomposition of, by Hydrofluoric acid ....	14, 252	„ -oil, modifications of ....	14, 242
„ -oil, decomposition of, by Iodide of Ammonium ....	14, 254	„ -oil, Monohydrochlorate ....	14, 265
„ -oil, decomposition of, by Iodine ....	14, 248	„ -oil, natural oils isomeric with ....	14, 281
„ -oil, decomposition of, by Lime ....	14, 254	„ -oil, oils isomeric with ....	14, 271
„ -oil, decomposition of, by Litharge and Minium ....	14, 254	„ -oil, oxidizing properties of oxygenated ....	14, 508
„ -oil, decomposition of, by Nitric acid ....	14, 249	„ -oil, ozonised ....	14, 256
„ -oil, decomposition of, by Nitrous acid ....	14, 250	„ -oil, preparation of terephthalic acid from ....	13, 13
„ -oil, decomposition of, by Nitroprusside of Copper ....	14, 254	„ -oil, resins from ....	18, 20
„ -oil, decomposition of, by Oxalic acid ....	14, 251	„ -oil, solutions of, in alcohol, acetone, wood-spirit, &c. ....	14, 271
„ -oil, decomposition of, by Oxygen gas ....	14, 247	„ -oil, solutions of other bodies in ....	14, 270
„ -oil, decomposition of, by Potash ....	14, 253	„ -oil, vapour-tension of, at different temperatures....	1, 262
„ -oil, decomposition of, by Potassium....	14, 253	Turpethic acid ....	17, 454
„ -oil, decomposition of, by Sulphide of Phosphorus ....	14, 253	Turpethin ....	17, 454
„ -oil, decomposition of, by Sulphuric acid ....	14, 250	Turpetholic acid ....	17, 455
„ -oil, decomposition of, by Tartaric acid ....	14, 251	Turpeth-resin ....	17, 453
„ -oil, English ....	14, 242	<i>Turpethum ammoniacale</i> ....	16, 79
„ -oil, extraction and purification of ....	14, 241	„ <i>minerale</i> ....	6, 28
„ -oil, French ....	14, 242	Turquoise ....	3, 309
„ -oil, Hydrate of ....	14, 258	Turtle fat ....	16, 400
„ -oil, Hydrated oxide of ....	14, 256	<i>Tussilago farfara</i> , ferment-oil of ....	14, 406
		Two-fifths Hydrocarbon, <i>see</i> Naphthalin ....	14, 1
		Two-thirds Cyanide of Copper....	8, 1
		„ Silicate of Alumina....	3, 411
		„ Silicate of Magnesia ....	3, 395
		Type-metal ....	5, 175
		Types, Dumas' theory of ....	7, 15
		„ general view of....	7, 153
		„ and substitution, connection of theory of, with the radical theory ....	7, 16
		Typhoxylin ....	15, 176
		Tyrosine ....	13, 358
		Tyrosine-sulphuric acid ....	13, 362

## U.

Ulmic acid ....	15, 158	Ulm, action of nitric acid on ....	17, 465
„ (Boullay's) ....	17, 462	„ action of oil of vitriol on ....	17, 465
„ (Mulder's) ....	17, 472	„ and Ulmic acid, formation of, from cane-sugar ....	15, 255
„ (Peligot's) ....	17, 466		
Ulm, action of chlorine on ....	17, 464		

Ultimate analysis of organic compounds ....	7, 86	Uranic Succinate ....	10, 123
Ultramarine ....	3, 457	„ Suerate, colloidal ....	15, 539
Umbelliferone obtained by dry distillation of galbanum resin	17, 238	„ Sulphantimoniate ....	4, 391
Undecomposed ponderable substances, division of, into metalloïds and metals ....	2, 1	„ Sulpharseniate ....	4, 314
Uniaxial Mica ....	3, 428	„ Sulpharsenite ....	4, 314
Unsaponifiable Fats ....	7, 229	„ Sulphates ....	4, 176
<i>Upas Tieuté</i> , preparation of strychnine from ....	17, 481	„ Sulphite ....	4, 174
Upas tree, preparation of antiarin from the sap of ....	16, 217	„ Sulphocarbonate ? ....	4, 178
Uralite ....	3, 406	„ Sulphocyanide ....	8, 86
Uramil ....	10, 178	„ Sulphomethylate ....	7, 306
„ preparation of murexide from ....	10, 194	„ Sulphomolybdate ....	4, 193
Uramilic acid ....	10, 190	„ Sulphovinate ....	8, 425
Uranates ....	4, 170	„ Tartrate ....	10, 295
Urauate of Ammonia ....	4, 183	„ Tellurate ....	4, 426
„ Baryta ....	4, 190	„ Tellurite ....	4, 426
„ Lead-oxide ....	5, 172	„ Tungstate ....	4, 192
„ Lime ....	4, 190	„ Valerate ....	11, 33
„ Magnesia ....	4, 192	„ Vanadate ....	4, 193
„ Potash ....	4, 186	Uranico-ammonic Acetate ....	8, 307
„ Silver-oxide ....	6, 186	„ Carbonate ....	4, 184
„ Soda ....	4, 189	„ Hydrochlorate ....	4, 186
„ Zinc-oxide ....	5, 49	„ Sulphate ....	4, 185
Uranic Acetate ....	8, 306	Uranico-argentic Acetate ....	8, 333
„ Arseniate ....	4, 313	„ -barytic Acetate ....	8, 307
„ Benzoate ....	12, 41	„ -calcic Carbonate ....	4, 190
„ Borate ....	4, 170	„ -calcic Phosphate ....	4, 191
„ Bromate ....	4, 179	„ -calcic Sulphate ....	4, 191
„ Carbonate ....	4, 170	„ -cupric Phosphate ....	4, 468
„ Chromate ....	4, 194	„ -magnesian Acetate ....	8, 307
„ Croconate ....	10, 393	„ -plumbic Acetate ....	8, 320
„ Cyanide ? ....	7, 421	„ -potassic Carbonate ....	4, 187
„ Hydrobromate ....	4, 179	„ -potassic Acetate ....	8, 307
„ Hydrochlorate ....	4, 182	„ -potassic Sulphate ....	4, 188
„ Iodate ....	4, 178	„ -sodic Acetate ....	8, 307
„ Lactate ....	11, 486	„ -sodic Arseniate ....	4, 313
„ Malate ....	10, 220	„ -sodic Carbonate ....	4, 189
„ Molybdate ....	4, 193	„ -sodic Pyrophosphate ....	4, 190
„ Nitrates ....	4, 182	Uranide of Iron ? ....	5, 300
„ Ochre ....	4, 159	Uranite ....	4, 159
„ Oxalate ....	9, 143	„ Calcareous ....	4, 191
„ Oxide ....	4, 167	Uranium ....	4, 157
„ Oxide, reactions of, with organic acids ....	7, 209	„ Alloys ....	4, 194
„ Oxide, reaction of, with tannic acid ....	15, 466	„ Ammonio-chloride ....	4, 186
„ Persulphomolybdate ....	4, 193	„ Bromide ....	4, 179
„ Phosphate ....	4, 171	„ Camphorate ....	14, 461
„ Pyrotartrate ....	11, 92	„ Chlorides ....	4, 180
„ Rhodizonate ....	10, 403	„ Citrates ....	11, 453
„ Salts ....	4, 169	„ Cuprocyanide ....	8, 7
„ Selenite ....	4, 178	„ double Acetates ....	13, 443
„ Suberate ....	13, 210	„ Fluoride ....	4, 182
		„ with Fluxes ....	4, 189
		„ Iodide ....	4, 178
		„ Oxides ....	4, 159
		„ Sulphide ....	4, 173
		„ and Iron, cyanides ....	7, 488
		„ and Lead, acetate ....	8, 320
		Uranoso-ammonic Carbonate ....	4, 184
		„ Sulphate ....	4, 185
		Uranoso-potassic Sulphate ....	4, 187

Uranoso-uranic Carbonate	....	4, 170	Urate of Strontia	....	10, 474
„ Hydrate	....	4, 166	Urates, metallic	....	10, 466
„ Hydrochlorate	....	4, 181	Urea	....	7, 360
„ Oxide	....	4, 161	„ action of boiling water	....	7, 368
„ Salts	....	4, 166	„ on	....	7, 368
„ Sulphate	....	4, 176	„ basic hydrochlorate of	....	13, 403
Uranoso-uranico-potassic Sulphate	....	4, 188	„ Benzoate	....	13, 406
Uranotantalite	....	4, 19, 192, 159	„ compounds of, with acids	....	7, 369
Uranous Acetate	....	8, 306	„ compound of, with Alloxantin	....	13, 405
„ Antimoniate	....	4, 491	„ compounds of, with Metallic Chlorides	....	7, 372; 13, 403
„ Arseniate	....	4, 313	„ compounds of, with Oxygen-salts	....	7, 372
„ Chlorate	....	4, 182	„ compounds of, with Metallic Oxides	....	7, 375
„ Formiate	....	7, 279	„ compounds of, with Organic acids	....	13, 405
„ Hydrate	....	4, 161	„ conversion of, into Ammelide by the action of anhydrous phosphoric acid	....	13, 403
„ Hydrochlorate	....	4, 181	„ Cyanurate?	....	9, 458
„ Iodate	....	4, 178	„ decomposition of, by dry distillation	....	7, 366
„ Molybdate	....	4, 193	„ decomposition of, by Mercurous nitrite	....	7, 367
„ Oxalate	....	9, 143	„ decomposition of, by Nitrate of silver	....	7, 369
„ Oxide	....	4, 159	„ decomposition of, by Sulphuric acid	....	7, 367
„ Oxide, bromide of	....	4, 179	„ fermentation of, in contact with air and water	....	7, 97
„ Oxide, chloride of	....	4, 181	„ formation of	....	13, 402
„ Oxide and Ammonium, chloride of	....	4, 186	„ formation of, by oxidation of proteïdes	....	13, 402
„ Oxide and Potassium, chloride of	....	4, 188	„ Gallate	....	13, 406
„ Oxide and Silica, hydrofluat of	....	4, 192	„ Hippurate	....	13, 406
„ Perchlorate	....	4, 182	„ and Magnesia, tartrate of	....	13, 405
„ Phosphates	....	4, 171	„ not decomposed by colourless nitric acid	....	7, 367
„ Salts	....	4, 161	„ occurrence of, in the animal body	....	13, 401
„ Sulphide	....	4, 173	„ Oxalate	....	9, 171
„ Sulphates	....	4, 174	„ Parabamate	....	13, 405
„ Sulphite	....	4, 174	„ Phloretate	....	13, 313, 486
„ Sulphocyanide	....	8, 85	„ preparation of, from Ammonium cyanate	....	7, 365
„ Sulphovinate	....	8, 425	„ preparation of, from Urine	....	7, 363
„ Tantalate	....	4, 192	„ product obtained from, $C^6N^4H^4O^6$	....	9, 470
„ Tartrate	....	10, 295	„ quantitative estimation of	....	7, 368
„ Tungstate	....	4, 192	„ reaction of, with Hypochlorite of Soda	....	13, 403
Uranyl, Chloride	....	4, 181	„ resolution of, into Carbonic acid, Nitrogen, and Water, by the action of nitrous acid	....	7, 367
„ Chloride with Hydrochlorate of Chinoline	....	13, 249	„ solubility of, in water	....	7, 369
„ and Ammonium, chloride	....	4, 186	„ solubility of, in alcohol	....	7, 575
„ and Potassium, chloride	....	4, 188			
Urao	....	3, 83			
Urari	....	17, 592			
Urate of Ammonia	....	10, 467			
„ Baryta	....	10, 473			
„ Cinchonine	....	17, 218			
„ Lead	....	10, 476			
„ Lime	....	10, 475			
„ Lithia	....	10, 473			
„ Magnesia	....	10, 476			
„ Mercury	....	10, 477			
„ Morphine	....	16, 436			
„ Potash	....	10, 468			
„ Quinine	....	17, 291			
„ Soda	....	10, 471			



Urea, Styphnate ....	13, 306	Urine, humous substance in ....	17, 460
„ Succinate.... ....	13, 405	„ normal colouring matter	
„ Tartrate .... ....	13, 406	of .... ....	18, 409
„ volatilisation of ....	7, 367	„ occurrence of Indigo in....	13, 36
Ureas, compound ....	9, 291	„ phosphorescence of ....	1, 187
Ureo-carbonate of Methyl ....	7, 377	„ preparation of Cratinine	
Ureo-carbonic acid ....	7, 377	from .... ....	10, 255
Ureters of the ox, purple dye ob-		„ preparation of Phosphorus	
tained from .... ....	18, 406	from .... ....	2, 103
Urethane .... ....	9, 274; 13, 537	„ preparation of Urea from	7, 363
„ Butylic .... ....	10, 148	„ putrefaction of ....	7, 105
Urethylane .... ....	7, 291	Urochrome .... ....	18, 410
Urian and Urianin ....	18, 410	Urocyanin .... ....	18, 407
Uric acid .... ....	10, 455	Uroerythric acid ....	18, 408
„ Hydrate of? ....	10, 466	Uroerythrin .... ....	18, 408
„ preparation of Alloxan		Uroglaucin .... ....	18, 410
from .... ....	10, 171	Urohæmatin ....	18, 409
„ preparation of Mur-		Uromelanin .... ....	18, 411
oxide from .... ....	10, 193	Urophæin, occurrence of, in uri-	
„ Sulphate of? ....	10, 466	nary concretions ....	18, 410
Urinary Calculi, preparation of		Uroxanthin ....	18,
Uric acid from ....	10, 457	Uroxanic acid ....	10, 478
Urine, colouring matters of ....	18, 407	Uroxin ....	10, 186
„ detection of Sugar in ....	15, 312	Urrhodin ....	18, 410
„ diabetic, preparation of		Ursone ....	17, 361
Dextroglucose from ....	18, 413	<i>Urtica urens</i> , ferment-oil of ....	14, 407
„ ferment of ....	18, 413	Usnates ....	17, 50
„ green pigment from jaun-		<i>Usnea florida</i> , preparation of	
diced ....	18, 80	Usnic acid from ....	16, 48
„ human, occurrence of In-		Usnic acid ....	17, 48
dican in ....	16, 1	Uvic acid ....	10, 346

## V.

Vaccinic acid ....	11, 421	Valerate of Bismuth ....	11, 34
Vacuum, crystallisation influ-		„ Cadmium ....	11, 34
enced by ....	1, 10	„ Cinchonidine ....	17, 227
„ heat-capacity of ....	1, 252	„ Cobalt ....	11, 36
<i>Valencianite</i> ....	3, 442	„ Copper ....	11, 36
Valeracetone ....	11, 79	„ Ethyl ....	11, 71
Valeracetonitrile ....	11, 123	„ Ferric ....	11, 35
Valeral....	11, 17	„ Ferrous ....	11, 35
„ -ammonia, preparation of		„ of Glucina ....	11, 33
Leucine from ....	11, 429	„ Lead ....	11, 34
Valeraldide ....	11, 17	„ Lime ....	11, 33
„ with Bisulphite of		„ Magnesia ....	11, 33
soda ....	11, 19	„ Manganese ....	11, 34
„ -ammonia....	11, 19	„ Mercury ....	11, 36
Valeramide ....	11, 113	„ Methyl ....	11, 67
Valeramine ....	11, 105	„ Morphine ....	16, 436
Valeranilide ....	11, 333	„ Nickel ....	11, 36
Valerate of Allyl ....	13, 545	„ Potash ....	11, 31
„ Alumina ....	11, 33	„ Quinine ....	17, 290
„ Ammonia ....	11, 30	„ Silver ....	11, 36
„ Amyl ....	11, 83	„ Soda ....	11, 31
„ Atropine ...	16, 455	„ Strontia ...	11, 32
„ Baryta ....	11, 32	„ Uranium ....	11, 33
„ Benzylene ....	12, 224	„ Valeric ....	11, 37

Valerate of Zinc ....	11, 34	Vanadiates of Lime ....	4, 102
„ Zirconia ....	11, 33	Vanadiates of Lithia ....	4, 101
Valerene ....	11, 1; 14, 312	Vanadiates of Magnesia ....	4, 102
„ from Oil of Valerian....	14, 313	Vanadiates of Manganous oxide	4, 247
<i>Valeria indica</i> , tallow of	16, 400	„ Mercuric oxide ....	6, 113
Valerianates or Valerates	11, 30	„ Mercurous oxide....	6, 112
Valerianic acid, Anhydrous	11, 37	„ Nickel-oxide ....	5, 387
„ Bihydrated ....	11, 29	Vanadiates of Potash ....	4, 99
„ Cacodyl of ....	11, 125	Vanadiates of Silver-oxide	6, 183
„ combinations ....	11, 29	Vanadiates of Soda ....	4, 102
„ decompositions	11, 28	„ Strontia....	4, 100
„ formation ....	11, 22	„ Thorina....	4, 103
„ preparation of,		Vanadiates of Uranic oxide	4, 193
from Angelica		„ Yttria ....	4, 102
root ....	11, 25	„ Zinc-oxide ....	5, 48
„ preparation of,		„ Zirconia ....	4, 103
from dolphin oil	11, 25	Vanadic Acetate ....	8, 305
„ preparation of,		„ Acid ....	4, 86
from fusel oil	11, 26	„ „ action of on or-	
„ preparation of,		ganic compounds	7, 127
from Valerian		„ „ arseniate of ....	4, 312
root ....	11, 23	„ „ with Fluxes ....	4, 100
„ separation of,		„ „ Nitrate of ....	4, 96
from Butyric		„ „ Phosphate of ....	4, 90
acid ....	11, 27	„ „ Sulphates of ....	4, 93
„ sources ....	11, 21	„ „ Tartrate of ....	10, 293
„ Anhydride ....	11, 37	„ „ and Potash, sul-	
„ Benzoate ....	12, 96	phate of ....	4, 100
„ Ether ....	11, 71	„ „ and Silica, hydro-	
Valerian oil, crude ....	14, 314	fluates of ....	4, 104
„ root, preparation of		„ „ and Silica, phos-	
Valerianic acid from	11, 23	phate of ....	4, 103
„ root, resin of....	17, 455	„ „ and Soda, phos-	
„ root, Tannic acid from	15, 533	phate of ....	4, 100
Valeric acid, syn. with Valeri-		Vanadic Arseniate ....	4, 312
anic acid.		„ Bihydriodate ....	4, 94
Valerins ....	11, 75	„ Bihydrochlorate ....	4, 94
Valerobenzolic Ether ....	12, 224	„ Borate ....	4, 90
Valerol....	11, 396	„ Bronzite ....	3, 404; 4, 81
Valerone ....	11, 78	„ Citrate ....	11, 452
Valeronitrile ....	11, 121	„ Formiate ....	7, 279
Valerotannic acid ....	15, 533	„ Chromate ....	4, 157
Valeryl, Bromide ....	11, 527	„ Molybdate ....	4, 104
„ Chloride ....	11, 527	„ Nitrate ....	4, 96
„ Urea ....	11, 124	„ Oxalates ....	9, 137
Vanadiates ....	4, 89	„ Oxide ....	4, 83
„ reaction of with Tan-		„ Oxide and Ammonia,	
nic acid ....	15, 466	basic hydrobromate of	4, 98
Vanadiates of Alumina ....	4, 103	„ Oxide and Ammonia,	
Vanadiates of Ammonia ....	4, 97	basic hydrochlorate of	4, 98
Vanadiates of Antimonic oxide....	4, 390	„ Oxide and Ammonia,	
Vanadiates of Baryta ..	4, 101	carbonate of ....	4, 98
Vanadiates of Cadmic oxide	5, 65	„ Oxide and Potash,	
„ Cobalt-oxide ....	5, 347	carbonate of ....	4, 100
„ Cupric oxide 4, 81; 5, 467		„ Oxide and Potash,	
„ Ferric oxide ....	5, 298	sulphate of....	4, 100
„ Ferrous oxide? ....	5, 298	„ Oxide and Silica, hy-	
„ Glucina ....	4, 102	drofluates of ....	4, 103
„ Lead-oxide 4, 81; 5, 168		„ Phosphate ....	4, 90

Vanadic Salts....	....	4, 83	Vapour-tension, measurement of		
„ Silicate	....	4, 103	in millimetres		
„ Tungstate	....	4, 104	of mercury	1, 260	
„ Sulphates	....	4, 93	Vapour-tensions, tables of	1, 262—264	
„ Tartrate	....	10, 293	Varec	3, 78	
Vanadite	....	5, 169	„ preparation of iodine		
„ of Ammonia....	....	4, 96	from	2, 249	
„ Manganous oxide....	....	4, 247	Variability in the rate of ex-		
„ Mercuric oxide	....	6, 112	pansion of solids and liquids as		
Vanadites	....	4, 84	compared with that of air	2, 235	
Vanadium	....	4, 80	<i>Variolaria dealbata</i> , preparation		
„ alloys	....	4, 104	of orcin from	12, 353	
„ compounds, solubility			Variolarin	16, 297	
of, in alcohol	....	8, 269	Varnish of the Pasto Indians	17, 428	
Cyanide	....	7, 419	Varvicite	4, 204	
„ Fluorides	....	4, 96	Vasculose	15, 126, 144	
„ Oxides	....	4, 82	Vauquelin	1, 5	
„ Phosphide....	....	4, 90	Vauquelinite	5, 486	
„ Sulphotungstate	....	4, 104	Veal-fat	16, 388	
„ Terchloride	....	4, 95	Vegetable Acid	7, 196	
„ and Ammonium,			„ Albumin	18, 426	
chloride	....	4, 98	„ Alkali	3, 10	
„ and Iron, cyanides....	....	7, 487	„ Casein	18, 425	
„ and Platinum, alloy	....	6, 331	„ Fibre, products		
„ and Potassium, fluor-			formed by the action		
ide	....	4, 100	of potash on	17, 466	
„ and Sodium, fluor-			„ Fibrin	18, 451	
ide	....	4, 101	„ Gelatin	18, 445	
Vanadous Sulphide	....	4, 90	„ Gum	15, 195	
„ „ borate of	....	4, 94	„ Jelly	15, 393	
Van Helmont	....	1, 4	„ Mould, products of		
Vanillin	....	14, 26	the action of potash		
Vaporization	....	1, 257	on....	17, 471	
„ absorption of heat ac-			„ Mucilage	15, 209	
companying	....	1, 272	„ Proteides	18, 424	
„ accompanied by in-			Vegetable substances, erema-		
crease of volume	1, 258		causis of	7, 92	
„ conditions of			„ substances, preserva-		
1, 258; 267, 268			tion of	7, 100	
„ instantaneous in a			„ Tallow	16, 388	
vacuum....	1, 271		„ Wax, Einhof's	17, 3	
„ phenomena accom-			Vegetables, preservation of	7, 116	
panying	1, 271		Vellarin	18, 243	
„ in a space already			Venice Turpentine	18, 18	
occupied with gas			<i>Venus</i> , syn. of Copper	5, 397	
or vapour	1, 265		Verantin	14, 134; 16, 36, 58	
„ time in which it			„ compound of, with		
takes place	1, 271, 272		alizarin	16, 60	
Vapour, situation in which its			„ formation of, from		
formation takes place	1, 272		rubian	16, 36	
„ -density of organic com-			„ preparation of, from		
pounds	7, 52		madder	16, 34	
Vapours, diffusion of	1, 21		Veratrate of Ethyl	13, 355	
„ expansion of, by heat	1, 224		Veratric acid	13, 354	
„ latent heats of	1, 282—285		Veratrine	18, 178	
„ and Permanent Gases,			Veratrol	13, 356	
distinction between	1, 257		Verdigris	5, 414	
„ refractive powers of....	1, 95		„ blue	8, 324	
„ tensions of mixed	1, 265		„ crystallised....	7, 326	



- Verdigris, distilled .... 8, 326  
 „ green .... 8, 325  
 „ purified .... 8, 326  
 Vermilion .... 6, 19  
 Vesuvian .... 3, 426  
 Vetches, composition of Legumin  
 from .... 18, 430  
 Vetch-shoots, preparation of As-  
 paragine from .... 10, 242  
 Viburnin .... 18, 243  
*Viburnum Lantana*, bitter from  
 the berries of .... 18, 243  
 Vienna green .... 8, 329  
 Villarsite .... 3, 395  
 Vinamylic Ether .... 11, 8  
 „ Oxysulphocarbonate 11, 62  
 Vinaniline .... 11, 305  
 Vincin .... 18, 243  
 Vinegar .... 8, 284  
 „ -lamp, Döbereiner's .... 8, 207  
 Vinelepidine, *see* Ethyl-lepidine.  
 Vinebromaniline .... 11, 309  
 Vinechloraniline .... 11, 309  
 Vinemylaniline .... 11, 331  
 Vinenaphthalidine, *see* Ethyl-  
 naphthylamine.  
 Vinenitriline .... 11, 309  
 Vinic Ether .... 8, 171  
 „ Ether, perchlorinated .... 9, 216  
 „ Ethers .... 7, 218  
 Vinobenzyllic Ether .... 12, 17  
 Vinobutyllic Ether .... 10, 70  
 Vinocacodyl .... 9, 72  
 Vinomellitic acid ? .... 10, 13  
 Vinomethylic Carbonate .... 8, 393  
 „ Ether .... 8, 192  
 „ Oxalate .... 9, 182  
 „ Oxysulphocarbonate 8, 444  
 Vinous fermentation  
 7, 98; 15, 265; 18, 462  
 Violenemetine, *see* Violine.  
 Violet colouring matter of flowers 16, 523  
 „ rays, supposed magnetiza-  
 tion of steel by .... 1, 167  
 „ substance derived from  
 caprylic alcohol .... 13, 186  
 Violine .... 17, 381  
 Virchow's Hæmatoïdin .... 18, 404  
 Viridates .... 15, 511  
 Viridic acid .... 15, 510  
 Viscin .... 17, 352  
 Viscous matter of egg-yolk, pre-  
 paration of cerebrin from .... 16, 481  
 Vital air .... 2, 20  
 „ force, decomposition in-  
 fluenced by .... 1, 115  
 „ process, electricity deve-  
 loped by .... 1, 429  
 Vitellin .... 18, 383  
*Vitex Agnus castus*, alkaloid  
 from the seeds of .... 18, 212  
*Vitis hederacea*, colouring mat-  
 ter of the leaves of .... 15, 516  
 „ *vinifera*, ferment-oil of .... 14, 407  
 „ *vinifera*, oil from the seeds  
 of .... 16, 314  
 Vitiveria oil .... 14, 403  
 Vitrification .... 1, 103  
 Vitriolic acid .... 2, 175  
 Vitriolised Tartar .... 3, 39  
 Vitriol-ochre .... 5, 242  
 „ oil of, theory of etherifi-  
 cation by .... 8, 231  
*Vitriolum album*, v. *Zinci* .... 5, 23  
*Vitrum Antimonii* .... 4, 360  
 Vivianite .... 5, 224  
 Vogel's Volatile Amber-resin .... 15, 1  
 Volatile aerid principles of plants 14, 471  
 „ Alkali .... 2, 416  
 „ Balsam of Sulphur .... 7, 168  
 „ Liver of Sulphur .... 2, 454  
 Völckel's Assamar .... 15, 250  
 Volatile Oils, *see* Oils, Volatile.  
 „ organic bases, natural  
 occurrence of .... 13, 387  
 Volatility .... 1, 257  
 „ of compounds .... 1, 93  
 Volta, his discoveries in elec-  
 tricity .... 1, 6  
 Voltaic Pile .... 1, 410, 426  
 Voltameter or Volta-electrometer,  
 Faraday's .... 1, 435  
 Volume, Atomic, and Atomic  
 Number, relation be-  
 tween .... 1, 58  
 „ Atomic, how deter-  
 mined .... 1, 58  
 „ Atomic or Specific, of  
 organic compounds,  
 Kopp's theory of .... 7, 47  
 „ Atomic or Specific, of  
 organic compounds,  
 Lowig's theory of .... 7, 51  
 „ Atomic or Specific, of  
 organic compounds,  
 Schröder's theory of .... 7, 50  
 „ changes of, resulting  
 from combinaton .... 1, 81  
 „ combining, of gases .... 1, 53, 66  
 „ increase of, accompany-  
 ing vaporization 1, 258, 278  
 „ and surface of the  
 liquid in decompos-  
 ing cells, effect of .... 1, 483  
 Volumes, Schröder's theory of 1, 74  
 Vulcanized Caoutchouc .... 17, 349  
 Vulpic acid .... 17, 149  
 Vulpulin, *see* Vulpic acid.

## W.

Wach's Phosphorus ....	1, 194	Water, oxygenated ....	2, 73
Wad ....	4, 208	„ physical properties of ....	2, 61
Wagnerite ....	3, 254	„ preparation of hydrogen	
Waïfa, preparation of Rutin		by decomposition of ....	2, 43
from ....	16, 501	„ preparation of pure ....	2, 60
Wall saltpetre ....	3, 214	„ presence of, essential to	
Walnut-oil ....	16, 313	fermentation ....	7, 97
„ -shells, green, colouring		„ quantities of, absorbed by	
matter of ....	17, 20	starch ....	15, 92
Warm indigo vats ....	13, 39	„ separation of, from alco-	
Warwickite ....	3, 482	hol by freezing ....	8, 260
Water, absorption of gases by ....	2, 65	„ simultaneous solution of	
„ action of, on bromide and		three salts in ....	2, 73
iodide of ethyl ....	13, 418	„ simultaneous solution of	
„ action of, on glass ....	2, 61	two salts in ....	2, 71
„ action of, on lead ....	5, 114	„ sources of ....	2, 45
„ action of, on sulphome-		„ thermic effects accom-	
thylates ....	10, 496	panying the solution of	
„ basis of, <i>see</i> Hydrogen.		liquid and solid bodies in	2, 69
„ -bath ....	1, 275	„ weight of a litre of ....	1, 281
„ Bitter-almond- ....	12, 29	„ weight of a standard	
„ Cherry- ....	12, 29	volume of ....	2, 61
„ compounds of, in variable		Waters, distilled ....	7, 166
proportions ....	2, 65	Waters, Mineral, occurrence of	
„ constitutional ....	2, 65	Baregin in ....	17, 457
„ of crystallisation 1, 14; 2, 63		Waters, occurrence of humus in	
„ de-aëration of, by boil-		natural ....	17, 460
ing ....	2, 61	Water-vapour, latent heat of ....	1, 283
„ decompositions of ....	2, 62	„ maximum tension	
„ decomposition of, by in-		of, at different	
candescent platinum ....	1, 301	temperatures ....	1, 259
„ decomposition of organic		„ presence of, in	
compounds by ....	7, 146	the air ....	2, 409
„ of, decrepitation ....	1, 13	„ tension of, at dif-	
„ definite compounds of ....	2, 62	ferent tempera-	
„ distilled ....	2, 61	tures 1, 262, 263, 264	
„ effect of in inducing the		„ total quantity of	
combination of hydro-		heat in ....	1, 285
gen and oxygen ....	2, 58	Watery distillate produced by	
„ electrolysis of ....	1, 446	destructive distillation ....	7, 80
„ and Ether, formation of,		Wavellite ....	3, 310
from alcohol ....	8, 225	Wax of leaves and fruits ....	18, 157
„ expansion of, in freezing	1, 256	„ from the bark of <i>Pinus syl-</i>	
„ expansion of by heat ....	1, 225	vestris ....	18, 116
„ formation of ....	2, 45	„ from rye-starch ....	18, 162
„ formation of, in fermenta-		„ of shellac ....	16, 399
tion ....	7, 97	„ sugar-cane ....	10, 81
„ freezing of, by the cold		„ from Sumatra ....	18, 163
produced by rapid		„ from various sources 18, 151—164	
evaporation of ether ....	1, 274	„ vegetable (Einhof's) ....	17, 3
„ -horehound, oil of ....	14, 404	Waxes, occurrence of, in the	
„ latent heat of ....	1, 254	vegetable kingdom ....	18, 135
„ Laurel ....	12, 39	Wedgewood's Pyrometer ....	1, 227
„ maximum density of ....	1, 255	Weigel's condensing apparatus	1, 288
„ memoirs relating to ....	2, 41, 42	Weight, atomic ....	1, 42
„ mixtures of, with alcohol	8, 258	Weights, atomic, table of ....	1, 50

- |                                   |                 |         |         |                                |      |         |             |        |
|-----------------------------------|-----------------|---------|---------|--------------------------------|------|---------|-------------|--------|
| Weight, chemical                  | ....            | ....    | 1, 42   | Woad-vat                       | .... | ....    | ....        | 13, 39 |
| „ combining                       | ...             | ....    | 1, 42   | Wolfram                        | .... | ....    | ....        | 5, 294 |
| Weights and Measures              | ....            | 1, 9—11 |         | Wollastonite                   | .... | ....    | 3, 388, 394 |        |
| „ table for converting            |                 |         |         | Wollaston's cryophorus         | .... | 1, 273  |             |        |
| French into English               |                 | 2, 498  |         | „ researches on com-           |      |         |             |        |
| Weissite                          | ....            | ....    | 3, 431  | binning propor-                |      |         |             |        |
| Weiss's crystallographical no-    |                 |         |         | tions                          | .... | 1, 6    |             |        |
| menclature                        | ....            | ....    | 1, 19   | „ scale of chemical            |      |         |             |        |
| Weld-seed oil                     | ....            | ....    | 16, 315 | equivalents                    | .... | 1, 63   |             |        |
| Welter's Bitter                   | ....            | ....    | 11, 212 | „ thimble-apparatus            |      | 1, 408  |             |        |
| Wernerite                         | ....            | ....    | 3, 432  | Wongski, Tannic acid from      | .... | 15, 520 |             |        |
| Wet rot in wood                   | ....            | ....    | 15, 157 | Wood                           | .... | ....    | 15, 147     |        |
| Whalebone, ossein in              | ....            | ....    | 18, 352 | „ -asbestos                    | .... | 3, 407  |             |        |
| Whale-oil                         | ....            | ....    | 16, 321 | „ -charcoal                    | .... | 15, 153 |             |        |
| Wheat gluten                      | ....            | ....    | 18, 447 | „ -charcoal, formation of, or- |      |         |             |        |
| „ -mucedin                        | ....            | ....    | 18, 443 | ganic compounds by the         |      |         |             |        |
| „ -starch                         | ....            | ....    | 15, 77  | action of nitric acid on       |      | 7, 41   |             |        |
| White cinnamon, bitter of         | ....            | 18, 244 |         | „ charring of, to diminish     |      |         |             |        |
| „ Copper                          | ....            | 5, 497  |         | the tendency to putre-         |      |         |             |        |
| „ of egg                          | ....            | 18, 282 |         | faction                        | .... | 6, 113  |             |        |
| „ Flux                            | ....            | 3, 20   |         | „ -creosote                    | .... | 15, 161 |             |        |
| „ Lead                            | ....            | 5, 123  |         | „ decayed, Xylochloric acid    |      |         |             |        |
| „ Lead ore                        | ....            | 5, 126  |         | from                           | .... | 15, 534 |             |        |
| „ Mustard, acrid principle        |                 |         |         | „ decaying, emission of light  |      |         |             |        |
| of                                | ....            | 14, 527 |         | by                             | .... | 7, 91   |             |        |
| „ Nickel-pyrites                  | ....            | 5, 389  |         | „ decaying, phosphorescence    |      |         |             |        |
| „ Pig-iron                        | ....            | 5, 212  |         | of                             | .... | 1, 191  |             |        |
| „ Pitch, preparation of Syl-      |                 |         |         | „ decomposition of, by the     |      |         |             |        |
| vic acid from                     | ....            | 17, 319 |         | action of the air at ordi-     |      |         |             |        |
| „ Precipitate, fusible            | ....            | 6, 87   |         | nary temperatures              | .... | 15, 156 |             |        |
| „ Precipitate, infusible          | 6, 85, 427      |         |         | „ decomposition of, by the     |      |         |             |        |
| „ Tellurium                       | ....            | 6, 250  |         | action of water in con-        |      |         |             |        |
| „ Vitriol                         | ....            | 5, 23   |         | tact with iron and             |      |         |             |        |
| Wichtyn                           | ....            | 5, 286  |         | air                            | .... | 15, 160 |             |        |
| Williamsite                       | ....            | 5, 47   |         | „ decomposition of, by aque-   |      |         |             |        |
| Wild Thyme, oil of                | ....            | 14, 403 |         | ous alkalis                    | .... | 15, 160 |             |        |
| Willow-bark, preparation of Sali- |                 |         |         | „ decomposition of, by chlo-   |      |         |             |        |
| cin from                          | ....            | 15, 432 |         | rine                           | .... | 15, 160 |             |        |
| Wind-furnace                      | ....            | 2, 35   |         | „ decomposition of, at high    |      |         |             |        |
| Window-glass                      | ....            | 3, 379  |         | temperatures                   | .... | 15, 147 |             |        |
| Wine, occurrence of glycerin in   | 13, 566         |         |         | „ decomposition of, at high    |      |         |             |        |
| „ -oil                            | ....            | 13, 175 |         | temperatures, with li-         |      |         |             |        |
| „ -oil, formation of              | 8, 237; 13, 420 |         |         | imited access of air           | .... | 15, 159 |             |        |
| „ -oil, sulphovinate of           | 13, 177         |         |         | „ decomposition of, by the     |      |         |             |        |
| „ -vinegar                        | ....            | 8, 284  |         | joint action of air, car-      |      |         |             |        |
| „ -yeast                          | ....            | 18, 463 |         | bonic acid, aqueous va-        |      |         |             |        |
| Winckler's Amorphous Qui-         |                 |         |         | pour, and ammonia, at          |      |         |             |        |
| nine                              | ....            | 17, 305 |         | a high temperature             | .... | 15, 160 |             |        |
| Winter-green oil, methylsalicylic |                 |         |         | „ decomposition of, by ni-     |      |         |             |        |
| acid in                           | ....            | 12, 255 |         | tric acid                      | .... | 15, 160 |             |        |
| „ -green oil, preparation of      |                 |         |         | „ decomposition of, by oil     |      |         |             |        |
| salicylic acid from               | ....            | 12, 247 |         | of vitriol                     | .... | 15, 160 |             |        |
| „ -rape oil                       | ....            | 17, 554 |         | „ decomposition of, in water   |      |         |             |        |
| Wires, Polar, of Voltaic Battery  | 1, 431          |         |         | free from air                  | .... | 15, 159 |             |        |
| Witherite                         | ....            | 3, 138  |         | „ destructive distillation of  |      |         |             |        |
| Woad-leaves, preparation of In-   |                 |         |         | 7, 82; 15, 149                 |      |         |             |        |
| dican from                        | ....            | 16, 2   |         | „ -ether                       | .... | 7, 256  |             |        |
| „ preparation of In-              |                 |         |         | „ fossil, preparation of re-   |      |         |             |        |
| diglucin from                     | ....            | 15, 303 |         | tene from                      | .... | 17, 9   |             |        |



Wood, heat evolved in the combustion of various kinds of ....	1, 293	Wood-vinegar, crude ....	15, 149
„ -naphtha ....	7, 258	„ volatile oils produced by distillation of ....	9, 56
„ pectic acid from ....	15, 413	Woody fibre ....	15, 126
„ phenomena exhibited by, during fermentation ....	7, 101	„ absorption of atmospheric nitrogen by, during eremacausis ....	7, 93
„ preparation of Acetic acid by dry distillation of ....	8, 285	„ formation of humus by action of alkalis on ....	17, 460
„ preservation of ....	7, 112	„ preparation of formic acid from ....	7, 272
„ preservation of, by steeping ....	7, 113	Wool, action of metallic salts on ....	18, 352
„ putrefaction of damp, in confined air ....	7, 94	„ action of Nitric acid on ....	18, 351
„ removal of the constituents of the sap from, with a view to its preservation ....	7, 112	„ action of Potash on ....	18, 352
„ rotten, humous substances in ....	17, 458, 471	„ action of Sulphuric acid on ....	18, 351
„ soot produced by imperfect combustion of ....	7, 85	„ coloration of, by Picric acid ....	18, 352
„ -spirit ....	7, 258	„ dry distillation of ....	18, 351
„ -spirit, crude ....	15, 150	„ fats of ....	16, 400
„ -spirit, crude, preparation of Toluene from ....	12, 228	„ fibre, composition of ....	18, 351
„ -spirit, expansion of by heat ....	1, 226, 227	„ (sheep's), purification of ....	18, 351
„ -spirit, solution of Turpentine oil in ....	14, 271	„ amount of sulphur in ....	18, 351
„ -spirit, solution of Volatile oils in ....	7, 169	Wootz ....	5, 206
„ -tar ....	7, 258	Wormseed oil ....	14, 316; 15, 40
„ -tar, preparation of Carbolic acid from ....	11, 140	„ preparation of Santonin from ....	16, 250
„ -vinegar ....	7, 258; 8, 284	Wormwood-bitter ....	17, 354
		Wormwood, oil ....	14, 350
		Wörthite ....	3, 414
		Woulfe's apparatus ....	1, 290
		Wrightine ....	17, 594

## X.

Xanthamide ....	9, 276	Xanthate of Soda ....	8, 456
„ with Cuprous Chloride ....	9, 279—282	„ Tin ....	8, 457
„ with Cuprous Iodide ....	9, 278	„ Zinc ....	8, 457
„ with Cuprous Sulphocyanide ....	9, 282	Xanthein ....	16, 513
„ Platinum-compound of ....	9, 283	Xanthene Sulphide ....	9, 394
Xanthamylamide ....	11, 116	Xanthic acid ....	8, 448
Xanthates ....	8, 450	„ ether ....	8, 439
Xanthate of Ammonia ....	8, 451	„ oxide ....	10, 454
„ Baryta ....	8, 456	Xanthin, Higgin's ....	14, 136; 16, 68
„ Copper ....	8, 459	„ Kuhlmann's ....	16, 69
„ Lead ....	8, 457	Xanthomethylic acid ....	7, 293
„ Lime ....	8, 456	Xanthopinic acid ....	14, 436
„ Mercury ....	8, 461	Xanthophyll ....	16, 515
„ Potash ....	8, 452	Xanthophyllite ....	3, 462
„ Silver ....	8, 461	Xanthopicrite, <i>see</i> Berberine.	
		Xanthoproteic acid ....	18, 264
		Xanthorhamnin ....	15, 349; 16, 71
		<i>Xanthorrhæa hastilis</i> , resin of ....	17, 386

Xanthotannic acid	....	....	15, 533	Xylite-resin, yellow	....	....	9, 50
Xanthoxylene	....	....	14, 315	Xylitic Naphtha	....	....	9, 50
Xanthoxylin	....	....	17, 369	Xylochloric acid	....	....	15, 534
Xenolite	....	....	3, 414	Xyloïdin	....	....	15, 106
Xuthene Sulphide	....	....	9, 394	Xylol or Xylene	....	....	13, 116
Xylidine	....	....	13, 147	Xyloretin	....	....	17, 443
Xylite-oil	....	....	9, 48	Xylostein	....	....	16, 102
„ -resin, brown	....	....	9, 49				

## Y.

Yeast	....	....	18, 459	Yttria, Iodate	....	....	3, 288
„ action of, in inducing fermentation	....	....	7, 110	„ Malate	....	....	10, 220
„ constitution and growth of, in saccharine solutions	....	....	15, 266	„ Meconate	....	....	12, 428
„ fermentation of sugar in contact with	....	....	7, 98	„ Molybdate	....	....	4, 78
„ influence of, in vinous fermentation	....	....	15, 265	„ Nitrate	....	....	3, 290
Yellow colouring matter of				„ Oxalate	....	....	9, 134
Guaiac resin	....	....	17, 246	„ Phosphates	....	....	3, 287
„ Earth	....	....	5, 282	„ -salts	....	....	3, 285
„ of Flowers	....	....	16, 513	„ Selenite	....	....	3, 288
„ Gamboge	....	....	17, 416	„ separation of, from Ferric oxide	....	....	3, 284
„ Iron-ore	....	....	5, 268	„ Silicates	....	....	3, 409
„ Lead-ore	....	....	5, 167	„ Silicate of, with Silicate of Alumina	....	....	3, 420
„ of Leaves, resinous	....	....	16, 515	„ Succinate	....	....	10, 122
„ Oxide of Lead	....	....	5, 108	„ Sulphates	....	....	3, 287
„ Pods, jelly from	....	....	15, 412	„ Sulphite	....	....	3, 287
„ Pods, preparation of Chlororubin from	....	....	16, 70	„ Tartrate	....	....	10, 291
„ Pods, preparation of Crocin from	....	....	16, 508	„ Tellurate	....	....	4, 425
„ Pods, tannic acid from	....	....	15, 520	„ Tellurite	....	....	4, 425
„ Prussiate of Potash	....	....	7, 453	„ Tungstate	....	....	4, 45
„ Resin of Botany Bay, preparation of Picric acid from	....	....	11, 213	„ Vanadate	....	....	4, 102
„ Sulphide of Arsenic	....	....	4, 373	„ and Ammonia, carbonate	....	....	3, 290
„ of Turmeric, resinous	....	....	16, 518	„ and Potash, carbonate of	....	....	3, 290
Young's Battery	....	....	1, 425	„ and Potash, oxalate of	....	....	9, 135
Ytterite	....	....	3, 409	„ and Potash, sulphate of	....	....	3, 290
Yttria	....	....	3, 283	„ and Soda, carbonate of	....	....	3, 290
„ Acetate	....	....	8, 303	Yttrium	....	....	3, 282
„ Arseniate	....	....	4, 309	„ Bromide	....	....	3, 289
„ Benzoate	....	....	12, 40	„ Chloride	....	....	3, 289
„ Borate	....	....	3, 286	„ Cyanide	....	....	7, 417
„ Bromate	....	....	3, 289	„ Ferrocyanide	....	....	7, 486
„ Carbonate	....	....	3, 286	„ Fluoboride	....	....	3, 290
„ Chromate	....	....	4, 155	„ Fluoride	....	....	3, 289
„ Citrate	....	....	11, 452	„ Iodide	....	....	3, 288
„ Croconate	....	....	10, 392	„ oxide	....	....	3, 283
„ Cyanate	....	....	8, 68	„ Phosphide	....	....	3, 286
„ with Fluxes	....	....	3, 291	„ -salts, solubility of, in alcohol	....	....	8, 269
„ Hydrate	....	....	3, 285	„ Selenide	....	....	3, 288
„ Hyposulphate	....	....	3, 287	„ Sulpharseniate	....	....	4, 309
				„ Sulpharsenite	....	....	4, 309

Yttrium, Sulphide ....	3, 287	Yttrium and Potassium, fluoride	3, 290
„ Sulphocyanide ....	8, 85	„ and Silicium, fluoride	3, 410
„ Sulphomolybdate ....	4, 78	Yttrocerite ....	3, 271, 282
„ and Mercury, chloride	6, 109	Yttro-ilmenite ....	4, 19
„ and Potassium, chloride	3, 290	Yttrotantalite ....	4, 12

## Z.

Zamboni's or De Luc's pile	1, 426	Zinc Fluoboride ....	5, 33
„ pile of two ele- ments ....	1, 427	„ Fluoride ....	5, 33
Zeazonite ....	3, 445	„ Fulminating double salts of	9, 298
Zeilanite ....	5, 275	„ Hydrated Oxide....	5, 11
Zein ....	18, 442	„ Hydrated Selenide ....	5, 27
Zeise's indifferent sulphuretted oil ....	8, 349	„ Hydrated Sulphide ....	5, 23
Zeolite, lamellar ....	3, 447	„ Hydride ....	5, 13
Zero of Heat, absolute....	1, 302	„ Hydrothiosulphocyanide....	8, 101
Zero-point of Thermometers, shifting of ....	1, 236	„ Hyposulpharsenite ....	5, 49
Zinc ....	5, 1	„ Iodide ....	5, 28
„ Albuminate ....	18, 306	„ Iodoplatinate ....	6, 333
„ Alloys ....	5, 51	„ Manganidecyanide ....	7, 425
„ Amalgam ....	6, 122	„ Nitride ....	5, 33
„ Ammonio-bromide ....	5, 40	„ Nitroprusside ....	8, 133
„ Ammonio-chloride ....	5, 41	„ Ore, red ....	5, 10
„ Ammonio-iodide ....	5, 40	„ Oxide ....	5, 5
„ Ammonio-sulphocyanide....	8, 86	„ with Ammonia ....	5, 35
„ Antimonide ....	5, 50	„ with Asparagine....	10, 247
„ Argentocyanide ....	8, 31	„ with Cobalt-oxide	5, 353
„ Arsenide ....	5, 49	„ with Ferric oxide	5, 313
„ Aurocyanide ....	8, 42	„ with Fluxes ....	5, 45
„ blowpipe reactions of	5, 11, 45	„ Iodide of ? ....	5, 29
„ Bromide ....	5, 29	„ with Potash ....	5, 43
„ Bromo-aurate ....	6, 239	„ with Soda ....	5, 44
„ Bromopalladite ....	6, 356	„ testing of purity of ....	5, 9
„ Bromoplatinate ....	6, 333	Zinc, Oxychloride ....	5, 31
„ Carbide ? ....	5, 13	„ Oxyiodide ....	5, 28
„ Chloride ....	5, 30	„ Oxysalts of—	
„ Chloride, compound of, with Urea ....	13, 404	Acetate ....	8, 308
„ Chloride of, with Cratinine	10, 259	Acetate ....	13, 476
„ Chloride of, with Cyanide of Mercury ....	8, 24	Alloxanate ....	10, 165
„ Chloride, with the Hydro- chlorates of Quinidine....	17, 300	Aluminate ....	5, 46
„ Chloro-aurate ....	6, 239	Ammonio-bromate ....	5, 40
„ Chloropalladite ....	6, 356	Ammonio-hyposulphate	5, 37
„ Chloroplatinate ....	6, 334	Ammonio-hyposulphite	5, 37
„ Chloroplatinite ....	6, 334	Ammonio-iodate ....	5, 40
„ Chromidecyanide ....	7, 425	Ammonio-osmiamate	6, 421
„ Cobaltidecyanide ....	7, 495	Amygdalate ....	15, 430
„ commercial, impurities in	5, 2	Amylosulphate ....	11, 59
„ Cuprocyanide ....	8, 7	Antimoniate....	5, 50
„ Cyanide ....	7, 422	Arseniate ....	5, 49
„ Ferrocyanide ....	7, 489	Arseniate of, with Ammonia....	5, 50
„ Flowers of ....	5, 5	Aspartate ....	10, 236
		Azelaate ....	17, 81
		Benzoate ....	12, 41
		Benzoglycolate ....	12, 67
		Bimethylophosphate....	12, 483
		Binitroethylate ....	12, 558



## Zinc: Oxysalts of—

Binitroethylate with ethyl	....	12, 559
Bisulphometholate	....	12, 485
Borate	....	5, 17
Bromate	....	5, 30
Butyrate	....	10, 86
Camphorate	....	14, 461
Carbonates	....	5, 13
Chlorate	....	5, 32
Chromate	....	5, 48
Chrysammate	....	12, 5
Cinnamate	....	13, 276
Citrate	....	11, 454
Croconate	....	10, 393
Digitalate	....	16, 340
Ethylsulphite	....	8, 410
Ethyltrothionate	....	12, 514
Formiate	....	7, 279
Fulminates	....	9, 297
Fumarate	....	10, 28
Gallate	....	12, 409
Glycerate	....	13, 572
Glycolate	....	12, 510
Glyoxylate	....	13, 435
Hippurate	....	12, 78
Hydriodate	....	5, 28
Hydriodite	....	5, 29
Hydrobromate	....	5, 29
Hydrochlorate	....	5, 31
Hydrofluorate	....	5, 33
Hypochlorite	....	5, 32
Hypophosphite	....	5, 17
Hyposulphate	....	5, 22
Hyposulphite	....	5, 21
Iodate	....	5, 29
Kinate	....	16, 230
Lactate	....	11, 488
Linoleate	....	16, 308
Malate	....	10, 221
Maleate	....	8, 158
Meconate	....	12, 428
Mellitate	....	10, 8
Metaphosphate	....	5, 18
Methylobithionate	....	12, 489
Molybdate	....	5, 47
Nitrate	....	5, 33
Nitrobenzoate	....	12, 125
Nitrohippurate	....	12, 131
Oleate	....	17, 72
Osmiamate	....	6, 421
Oxalate	....	9, 151
Oxyxanthate	....	8, 463
Perchlorate	....	5, 33
Permanganate	....	5, 49
Phloretate	....	13, 311
Phosphates	....	5, 17
Phosphite	....	5, 17
Phthalate	....	13, 13

## Zinc: Oxysalts of—

Picrate	....	11, 223
Piperate	....	15, 10
Propionate	....	10, 555
Pyromucate	....	10, 385
Pyrophosphate	....	5, 18
Pyrotartrate	....	11, 93
Racemate	....	10, 357
Rhodizonate	....	10, 403
Ricinoleate	....	17, 134
Roccellate	....	16, 477
Saccharates	....	11, 519
Salicylite	....	12, 242
Sarcosylate	....	11, 500
Seleniate	....	5, 28
Selenites	....	5, 27
Silicate	....	5, 46
Stannate	....	5, 105
Suberate	....	13, 210
Succinate	....	10, 124
Sulphates	....	5, 22
Sulphite	....	5, 21
Sulphocinnamate	....	13, 280
Sulphosalicylate	....	12, 280
Sulphosomethylate	....	7, 300
Sulphotellurite	....	5, 51
Sulphovinate	....	8, 425
Xanthate	....	8, 457
Tannate	....	15, 467
Tartrate	....	10, 311
Tartrovinat	....	10, 342
Tellurite	....	5, 51
Tetrathionate	....	5, 21
Trithionate	....	5, 21
Tungstate	....	5, 47
Uranate	....	5, 49
Vanadate	....	5, 48
Valerate	....	11, 34
Zinc, Oxysulphide	....	5, 20
„ Peroxide	....	5, 13
„ Persulphomolybdate	....	5, 47
„ Phosphide	....	5, 17
„ Platinocyanide of, with Ammonia	....	8, 55
„ -salts	....	5, 12
„ -salts, solubility of, in alcohol	....	8, 270
„ Selenide	....	5, 27
„ Seleniocyanide	....	8, 124
„ Suboxide?	....	5, 4
„ Sulphantimoniate	....	5, 50
„ Sulpharseniate	....	5, 50
„ Sulpharsenite	....	5, 49
„ Sulphide	....	5, 19
„ Sulphocarbonate	....	5, 26
„ Sulphocyanide	....	8, 86
„ Sulphomolybdate	....	5, 47
„ Sulphotungstate	....	5, 47
„ Telluride	....	5, 51

Zinc testing of purity of ....	5, 3	Zinc-ethyl, action of, on ammonia	
„ and Aluminum, fluoride ....	5, 46	and ammonia bases	13, 503
„ and Ammonium, chloride ....	5, 42	„ action of, on terchloride of phosphorus	12, 521
„ and Ammonium, cyanide ....	7, 423	Zincethylum ....	9, 90
„ and Ammonium, iodide ....	5, 40	Zinc-glance ....	5, 46
„ and Ammonium, malate ....	10, 222	„ -lead-spar ....	5, 127
„ and Barium, cyanide ....	7, 425	„ -methyl ....	7, 329
„ and Barium, iodide ....	5, 45	„ -methyl, action of, on terchloride of phosphorus	12, 491
„ and Bismuth, alloy ? ....	5, 51	„ -methyl, compound of, with Ethyl oxide	13, 397
„ and Calcium, cyanide ....	7, 425	„ -methyl, compound of, with Methyl oxide	13, 397
„ and Cobalt, alloy ....	5, 353	„ -methyl, preparation of	13, 397
„ and Copper, alloys ....	5, 477	Zinco-aluminic Sulphate ....	5, 46
„ Copper, and Gold, alloy ....	6, 246	„ -ammonic Carbonate ....	5, 36
„ Copper, and Iron, alloy ....	5, 496	„ -ammonic Metaphosphate	5, 37
„ and Iron, alloy ....	5, 312	„ -ammonic Molybdate ....	5, 48
„ and Iron, carbide ....	5, 314	„ -ammonic Oxalate ....	9, 151
„ and Iron, cyanides ....	7, 489	„ -ammonic Phosphate ....	5, 36
„ and Lead, alloy ....	5, 179	„ -ammonic Pyrophosphate ....	5, 37
„ and Lead - compounds of Orcein ....	12, 361	„ -ammonic Sulphate ....	5, 39
„ and Lead, cyanide ....	7, 428	„ -cobaltous Sulphate ....	5, 354
„ and Lead, malate ....	10, 224	Zinco-cupric Carbonate ....	5, 480
„ Lead and Tin, alloys ....	5, 181	„ -cupric Sulphate ....	5, 481
„ and Mercury, chloride ....	6, 123	Zincoid or Zincoïd ....	1, 431
„ and Mercury, cyanide ? ....	8, 24	Zinco-ferrous Sulphate ....	5, 314
„ and Mercury, iodide ....	6, 123	„ -magnesian Sulphate ....	5, 346
„ and Mercury, selenide ....	6, 123	„ niccolic Sulphate ....	5, 394
„ and Nickel, alloy ....	5, 394	„ -potassic Carbonate ....	5, 43
„ Nickel, and Copper, alloy	5, 497	„ -potassic Chromate ....	5, 48
„ and Nitrogen, boride ? ....	5, 36	„ -potassic Molybdate ....	5, 48
„ and Palladium, alloy ....	6, 356	„ -potassic Oxalate ....	9, 151
„ and Phosphorus, sulphide	5, 26	„ -potassic Silicate ....	5, 47
„ and Platinum, alloy ....	6, 333	„ -potassic Sulphate ....	5, 43
„ Platinum, and Copper, alloy	6, 338	„ -silicic Hydrofluorate ....	5, 47
„ and Potassium, alloy ....	5, 42	„ -sodic Carbonate ....	5, 45
„ and Potassium, chloride ....	5, 44	„ -sodic Sulphate ....	5, 45
„ and Potassium, cyanide ....	7, 424	„ -uranic Acetate ....	8, 310; 13, 444
„ and Potassium, fluoride ....	5, 44	Zincoximide ....	13, 504
„ and Potassium, iodide ....	5, 44	Zincphenylimide ....	13, 504
„ and Potassium, lactate ....	11, 488	Zincum ....	5, 1
„ and Potassium, tartrate ....	10, 311	Zincuretted Hydrogen gas ?	5, 13
„ and Silver, alloy ....	6, 193	Zinc-vitriol ....	5, 23
„ and Sodium, alloy ....	5, 44	Zinkenite ....	5, 177
„ and Sodium, chloride ....	5, 45	Zinking by galvanic precipitation	1, 501
„ and Sodium, cyanide ....	7, 425	Zircon ....	3, 463
„ and Sodium, iodide ....	5, 45	„ preparation of Zirconia from	3, 339
„ and Sodium, lactate ....	11, 488	Zirconate of Alumina ....	3, 349
„ and Tin, alloys ....	5, 105	„ Cupric oxide ....	5, 464
„ and Tin, amalgam ....	6, 126	„ Lime ....	3, 349
„ Tin, Lead, and Copper, alloy	5, 488	„ Potash ....	3, 347
Zinc-acetamide ....	13, 504	Zirconia ....	3, 338
Zinc-alum ....	5, 46	„ Acetate ....	8, 305
Zincamide ....	13, 503	„ Arseniate ....	4, 310
Zinc-amyl ....	11, 129	„ Benzoate ....	12, 40
Zincate of Ammonia ....	5, 35	„ Borate ....	3, 344
„ Potash ....	5, 43		
„ Soda ....	5, 44		
Zincethyl ....	9, 90; 10, 530		



Zirconia, Carbonate	....	....	3, 344	Zirconia and Potash, sulphate	3, 347
„ Citrate	....	....	11, 452	Zirconium	....
„ with Fluxes	....	....	3, 349	„ Alloys	....
„ Hydrate	....	....	3, 342	„ Amalgam	....
„ Nitrate	....	....	3, 346	„ Ammonio-chloride	....
„ Oxalate	....	....	9, 136	„ Carbide	....
„ Phosphate	....	....	3, 344	„ Bromide, hydrated	....
„ Rhodizionate	....	....	10, 402	„ Chloride	....
„ salts	....	....	3, 342	„ Fluoride, hydrated	....
„ Selenite	....	....	3, 345	„ Hyposulpharsenite	....
„ Silicate	....	....	3, 463	„ Oxide	....
„ Succinate	....	....	10, 122	„ Oxy-chloride, hy-	....
„ Sulphate	....	....	3, 344	„ drated	....
„ Sulphite	....	....	3, 344	„ Sulpharseniate	....
„ Tartrate	....	....	10, 292	„ Sulpharsenite	....
„ Tellurate	....	....	4, 426	„ Sulphide	....
„ Tellurite	....	....	4, 426	„ and Potassium, fluo-	....
„ Titanate	....	....	3, 487	„ ride	....
„ Valerate	....	....	11, 33	„ and Silicium, fluoride	....
„ Vanadate	....	....	4, 103	Zoiodin	....
„ and Ammonia, carbon-	....	....	3, 347	Zoisite	....
„ ate	....	....	3, 347	Zoogen	....
„ and Ammonia, sulphate	....	....	3, 347	Zoology, Chemical, subjects of	....
„ and Lead-oxide, silicate	....	....	5, 166	Zoophytes, Phosphorescence of	....
„ and Lime, silicate	....	....	3, 463		1, 182, 184
„ and Potash, carbonate	....	....	3, 347	Zygadite	....
„ and Potash, silicate	....	....	3, 463		3, 445

END.









